Points of Interest

User guide and technical specification

Points of Interest

User guide

Contents

Section Page no

Preface **4**
Contact details 4
Use of the product 4
Purpose and disclaimer 4
Copyright in this guide 5
Data copyright and other intellectual property rights 5
Trademarks 5
Back-up provision of the product 5
Using this guide 5

Chapter 1 **Introduction** **6**
Roles and responsibilities 7
Using Points of Interest 7

Chapter 2 **Using Points of Interest data with other Ordnance Survey products** **9**
Capture scale 9
Viewing the data 9
OS MasterMap Address Layers 11
Boundary-Line™ 12
Data association 12

Chapter 3 **Classification** **15**

Chapter 4 **Attribution** **17**
Record type 17
Unique reference number (URN) 17
TOID 17
TOID version 17
Verified address 17
Name 18
Address detail 18
Street name 18
Locality 18
Postcode 18
Telephone number 18
PointX classification code 19
Easting 19
Northing 19
Date of supply 19
Positional accuracy code 19

Chapter 5 **Supply** **20**
Geographic areas 20
User-defined area 20
Administrative areas 20
Ordering Points of Interest 21
Copyright file 21
Features file 21
Classification look-up file 21
Positional accuracy look-up file 22
Completeness file 22
Keyword search file 23
SIC search file 23
Descriptive Class reporting file 23
Notes on the background of data suppliers 24
Media formats 24

Chapter 6 **Pricing and licensing** **25**
Terminals 25
Term 25

Licence rights 25
Classification 25
Geographic extent 25
Chapter 7 Styling 26
Points of Interest symbology 28
Chapter 8 Data sources and data measures 29
Positional accuracy 29
Addressing 29
Unique referencing 29
Classification 30
Completeness 30
Sources of data 30
Annexe A Classification system (v2.3) 31
Annexe B Points of Interest provenance 43
Annexe C Completeness coding by category 45
Annexe D Product and service performance report form 47

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Preface

This user guide (hereafter referred to as the guide) is designed to provide an overview of Points of Interest (hereafter referred to as the product) and it gives guidelines and advice on how a customer might derive the maximum benefit from the product. It assumes a general knowledge of geographic information. If you find an error or omission in this guide, or otherwise wish to make a comment or suggestion as to how we can improve the guide, please contact us at the address shown below under contact details or complete the *Product and service performance report form* at annexe D and return it to us.

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Our Customer Service Centre will be pleased to deal with your enquiries:

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You are advised to copy the supplied data to a back-up medium.

Using this guide

The documentation is supplied in portable document format (PDF) only. Free Adobe® Acrobat Reader® software, which displays the guide, incorporates search and zoom facilities and allows you to navigate within. Hyperlinks are used to navigate between associated parts of the guide and to relevant Internet resources by clicking on the blue hyperlinks and the table of contents.

If you are unfamiliar with any words or terms used and require clarification please refer to the glossary at the end of the document.

Chapter 1 Introduction

Points of Interest is a dataset containing over 3.8 million different geographic features. All features are supplied with location, functional information and addresses where possible. It has been available continuously since 2002. The product covers all of Great Britain.

This user guide describes the main features of the data, suggests how customers can use the data and explains how the data are supplied. Whilst some of the more technical information may be of greater interest to those using the data on a regular basis within applications, everyone reading this user guide will gain an understanding of the key concepts of the data and the benefits an organisation can obtain from using it within location-based applications.

Points of Interest has a three-level classification to assist customers in identifying the features or sets of features they require. This classification is explained in detail in chapter 3 of this user guide, but to illustrate the wide range of features included within Points of Interest, the first level of classification, comprising nine groups, is given below.

- Accommodation, eating and drinking
- Commercial services
- Attractions
- Sport and entertainment
- Education and health
- Public infrastructure
- Manufacturing and production
- Retail
- Transport

As each feature is provided with a national grid coordinate, it can be visualised as points on a map using a geographical information system (GIS). When the data are combined with topographic data as shown in figure 1 below, Points of Interest becomes a useful component in location-based applications.

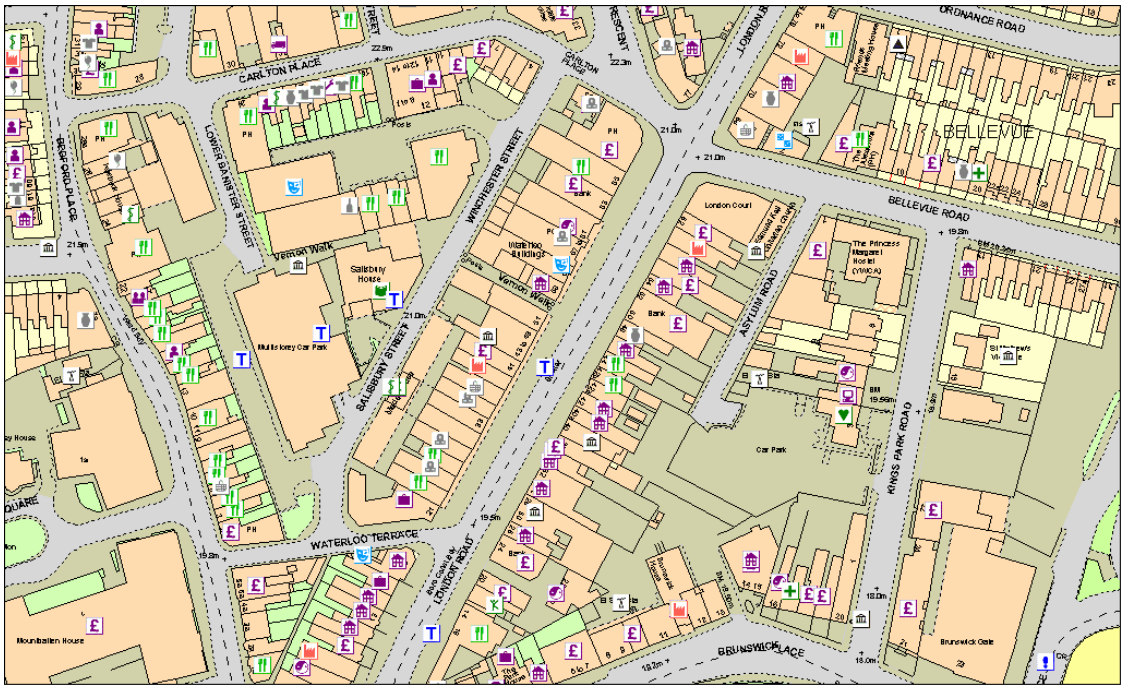

Figure 1: Points of Interest features over OS MasterMap® Topography Layer data. A legend for the symbols can be found in chapter 7.

Common applications that customers are already using Points of Interest for include:

- Citizen information services
- Distribution and provision of facilities and infrastructure
- Driver routing and navigation
- Emergency planning
- Location-based services
- Tourism

Each feature comes with a set of attribution that can be manipulated and analysed within a GIS or database so that customers can customise the data and learn more about the facilities within their chosen geographic areas.

The data are delivered in a text file format. The data can be ordered in a number of different geographic units, including a customer's own defined area. It is also possible to order either the whole dataset or subsets of data, based on the classification system, to suit particular needs.

Roles and responsibilities

Points of Interest is created and maintained by PointX, an independent company in the joint ownership of Ordnance Survey and Landmark® Information Group. Ordnance Survey is the sole 'data only' distributor for Points of Interest.

PointX collects data from over 170 suppliers, including Ordnance Survey. They receive updates from these suppliers on an ongoing basis. The suppliers are chosen for being the most authoritative source or sources for the particular type of feature they supply and for the quality and completeness of the data they supply. It should be noted, however, that for many types of feature there is no absolute, definitive source, nor can any list of the types of features found in Points of Interest be said to be complete. Points of Interest therefore comes with a number of indicators as to the likely currency, positional accuracy or completeness of any given set, which customers should take into consideration when using the data. More information on these issues can be found in chapter 5 and chapter 8.

PointX runs verification checks, provides National Grid coordinates and classifies each feature. PointX sends the data, quarterly, to Ordnance Survey, which distributes it to customers. Ordnance Survey manages the customer relationship.

The suppliers are responsible for providing the data to PointX in a manner and timescale agreed between each supplier and PointX.

Using Points of Interest

The primary use of Points of Interest is to allow identification of different facilities or resources within the built and natural environment.

The data can be used within a table format, such as a spreadsheet or a database, to create gazetteer or list type applications that allow people to search for a particular facility or resource. These applications make use of the attributes supplied on each feature and depend on the application system having a searching or querying facility that the customer can supply with search criteria.

For example, a query could be run to find out how many banks are within a certain locality or to compare the distribution of a number of different facilities across certain postcodes by using the classification and address attribution.

To extract the fullest possible value from the data, it is best viewed and analysed within a GIS that can use the coordinates to display each feature's geographic location as a point in combination with a topographic map. The combination of Points of Interest with topographic mapping gives context to the features, which cannot be derived from using it within a table or spreadsheet. It also provides the opportunity, depending on the functionality of the GIS, to:

- group the features into other subsets of data;
- combine the data with a customer's own, complementary datasets;
- customise the appearance of the Points of Interest features to suit the customer's requirements (Ordnance Survey provides a suggested set of symbols to get customers started); and
- extend the queries on the attributes by using a spatial element.

Taking the above example of banks, a GIS could calculate the distance between each bank to judge how far apart they actually are or from a position supplied by the customer. This could be a feature such as a car park or a train station, or a coordinate supplied from a mobile phone.

The customer could also input a geographic area, such as an electoral ward, within which the GIS could return a list of all the banks that fall within that boundary.

It is also recommended that customers update their holdings from Ordnance Survey at the very least every six months, and more frequently if possible to make sure that they comply with the terms of their licence and so that their applications are always serving the most current version of the data. Quarterly updates are included for all Points of Interest licences.

A customer can extend the functionality by linking their own data to the Points of Interest dataset and use both with other Ordnance Survey products to derive extra value and further datasets.

In summary, Points of Interest provides a customer with:

- over 600 different classifications of features supplied from the most authoritative sources available;
- a flexible method of ordering data by classification and by area, up to national coverage;
- the attribution to develop location finding and facility distribution applications; and
- access to regular updates so that applications can be kept current.

Chapter 2 Using Points of Interest data with other Ordnance Survey products

This section places the Points of Interest dataset within the context of other Ordnance Survey products and discusses how additional value can be gained by associating it with a customer's own data.

Capture scale

Each point has a coordinate that is accurate to at least 1 metre and often to 0.1 m.

The resolution of all reported records will be to 0.1 m where the coordinates are derived from Ordnance Survey address data. It will be 1 m where the feature's coordinates have been derived from Ordnance Survey large-scale topographic data. The accuracy will depend on the positional accuracy value assigned and is independent of the resolution. For more information on positional accuracy please see chapter 8.

This gives a capture scale equal to or better than Ordnance Survey large-scale topographic data, which is captured between 1:2500 scale (with a 1.1 m average positional accuracy (or root mean square error)) and 1:1250 scale (which has an average accuracy of 0.4 m).

Viewing the data

As seen in figure 1 above, providing the context of the physical environment within which the Points of Interest features exist adds another dimension of meaning to the data. It allows a spatial understanding of the features to develop. The National Grid coordinates that accompany each feature allows it to be displayed as a point, in its correct position with regard to the National Grid and any other map based on the same reference system.

The best combination from the point of both clarity and the ability to derive additional value from both products is OS MasterMap Topography Layer, which was used in figure 1 and is a large-scale product (typically between 1:1250 and 1:2500 scales). Another example is given below in figure 2.

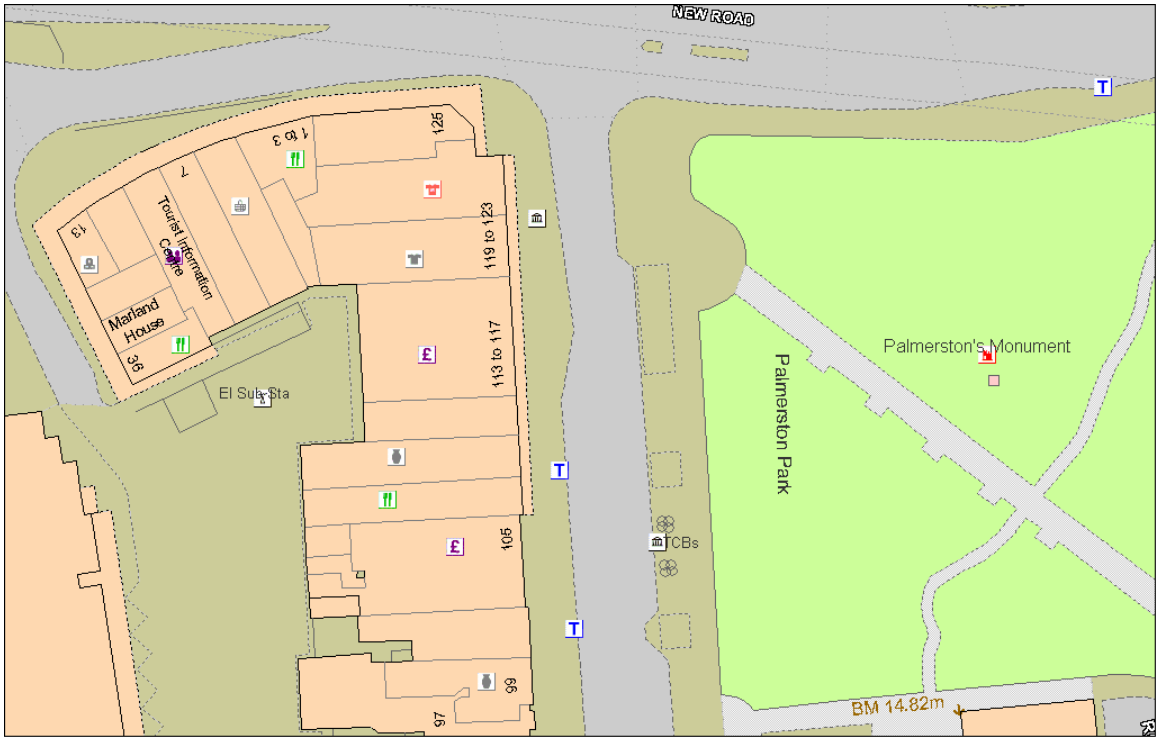

Figure 2: OS MasterMap Topography Layer with Points of Interest

At larger scales the real-world features represented by the Points of Interest feature can clearly be seen.

A slightly smaller scale, such as 1:10 000 scale colour raster or OS Street View™ (a 1:10 000 scale product) can also provide the necessary context.

Examples of each are given below in figures 3 and 4.

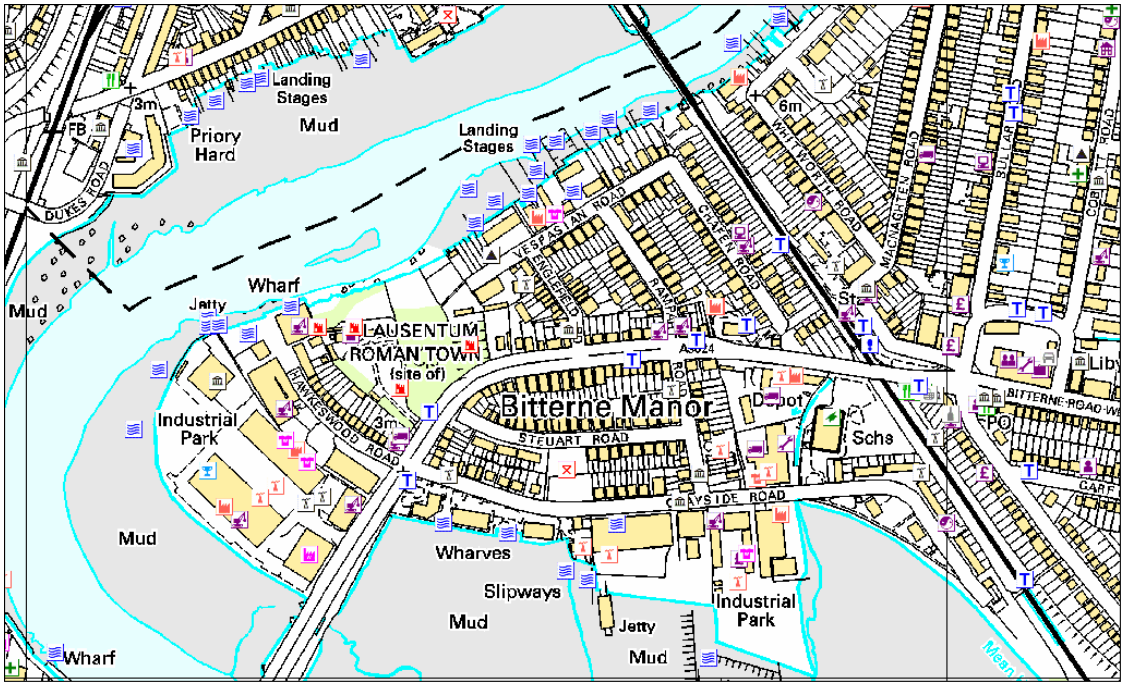

Figure 3: Points of Interest over 1:10 000 scale colour raster

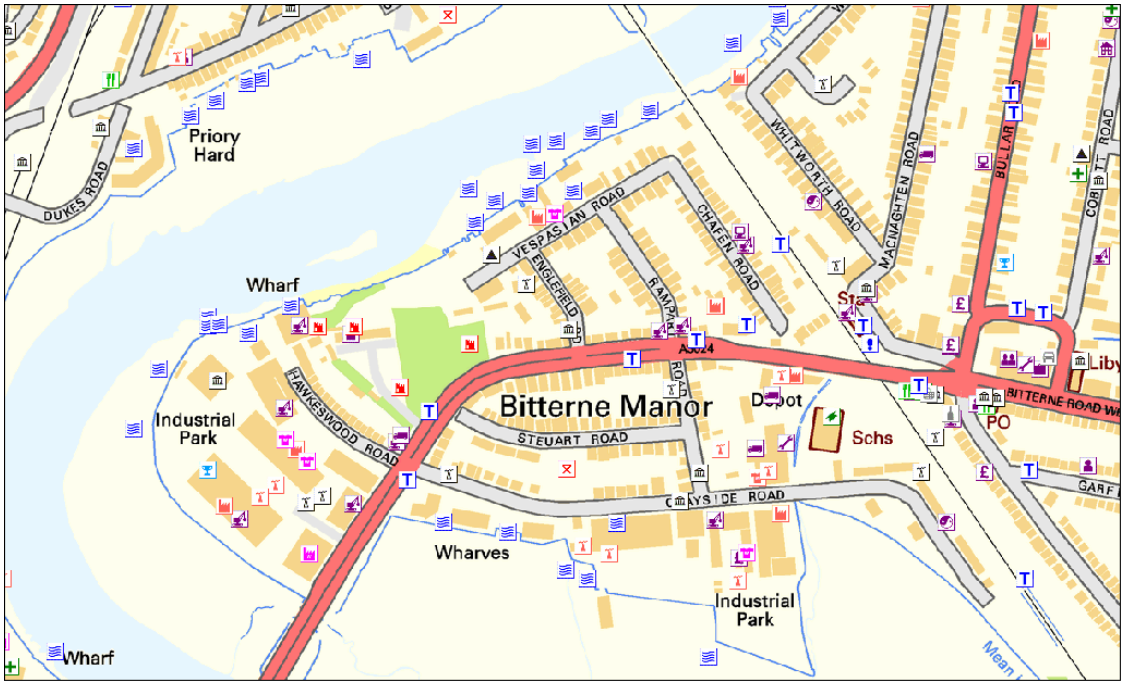

Figure 4: Points of Interest over OS Street View

OS MasterMap Imagery Layer, a dataset providing aerial images, can provide context that maps cannot. In figure 5, shown below, it is possible to see the types of activities that take place within the industrial units.

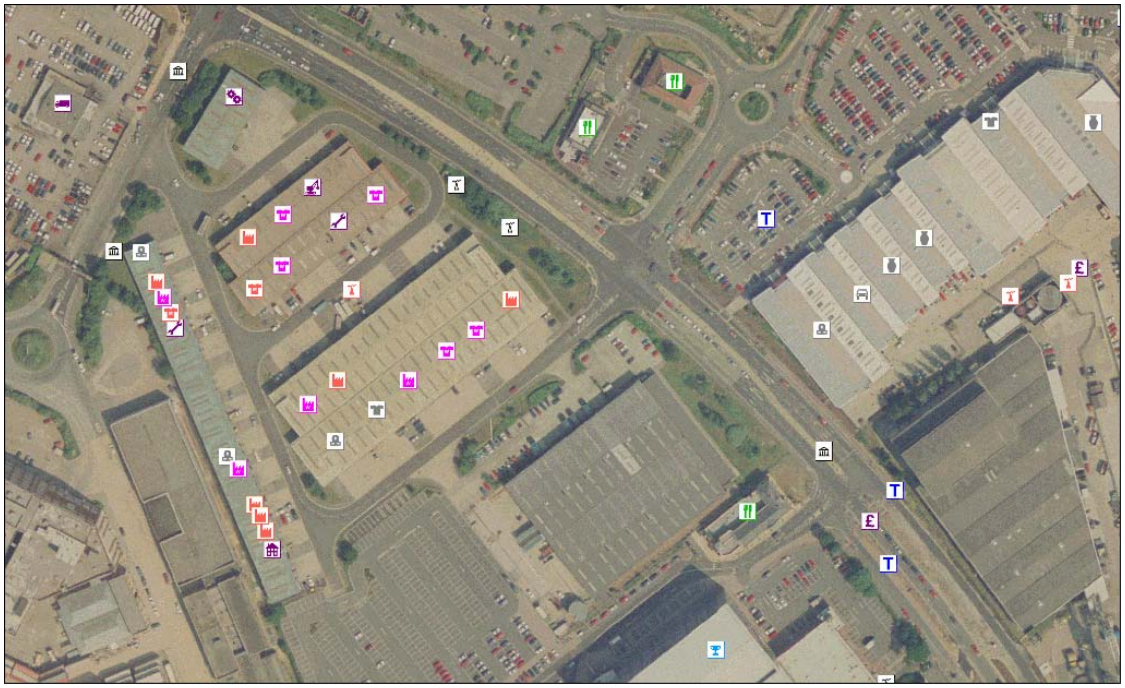

Figure 5: Points of Interest over OS MasterMap Imagery Layer

Whilst it is possible to view the data at any scale, the smaller the scale the harder it is to see what real-world feature the point represents. There are problems of points either being difficult to distinguish from each other or, if they are set to enlarge as the map is zoomed out, they can disappear behind each other.

OS MasterMap Address Layers

OS MasterMap Address Layers provides a comprehensive set of address information, including postal addresses, (including alternative names or aliases) geographic addresses and addresses for multiple premises. It is more extensive in terms of the address details it contains than Points of Interest. Points of Interest contains many features that are not found in OS MasterMap Address Layers, such as cash machines or bus stops. OS MasterMap Address Layers are used to find out where an address is located and Points of Interest is used to find out what activity takes place at the location.

For example, if an insurance company received a claim concerning an activity at a certain address, it could use both products to do an initial evaluation of the claim. Using OS MasterMap Address Layers they can identify the premise. It would be possible, using Points of Interest, to see if the alleged activity does take place there. If there is no match (Points of Interest shows no activity at the premise) or an inconclusive match (Points of Interest shows a different activity at the address) this might indicate that the claim needs further checking before it is processed. If there is a match, the claim might still need further checking, but being able to do a certain number of verification or logic checks at the desktop may result in more efficient and faster processing. Points of Interest could also provide telephone numbers and area context information.

Boundary-Line™

Boundary-Line provides a number of geographic administrative areas. Administrative areas can be used in spatial queries to link a feature to the administrative area and to look at distribution of services or infrastructure on an administrative area basis. Figure 6 below shows the number and distribution of a range of medical facilities within an inner city ward, shown outlined in blue.

Figure 6: Medical facilities within a city ward

Data association

Data association is a means of deriving more value from the data. It refers to the practice of linking the customer's own data to the product. There are tools readily available within GIS and most databases to link two or more datasets together through a common reference.

The common reference from one dataset is added to another. This leaves both datasets in their own tables but allows a query to link them together, on demand, to provide the requested information from each.

Points of Interest comes with each feature having its own unique reference number so that such associations can be made relatively easily.

In addition, a link already exists within the Points of Interest dataset if a customer also takes OS MasterMap Topography Layer. Each feature within OS MasterMap Topography Layer has a unique reference called a TOID®. Each TOID has a version number. Whenever there is a geometric change, such as an extension to a building or a realignment of a fence, or an attribute change, the version number is incremented to reflect the fact that different versions of the same feature have existed over time.

The example below explains how data association works.

Each OS MasterMap Topography Layer area feature has, as part of its attribution, a calculated area value in square metres. If a customer wanted to find out the approximate area of square metres given over to eating establishments within a certain area of a town centre, it would be possible to search the Points of Interest dataset for all features within the eating category. The TOIDs from the records returned can be cross referenced to the OS MasterMap Topography Layer table to return the area values from the records that match. In figure 7 below all the eating places (those features having a classification that starts '0102') on a street in a city were identified and linked, in the manner described above, to their associated building, to produce a list of areas, in square metres. Table 1 shows the results of the link based on the shared TOID (columns 'Points of Interest TOID' and 'OS MasterMap Topography Layer TOID'). When the areas are added together it gives an indicative street-level floor area, for dining and eating, of just over 1 707 square metres.

Figure 7: Restaurants

Points of Interest unique reference number	PointX classification code	Points of Interest TOID	OS MasterMap Topography Layer TOID	OS MasterMap Topography Layer calculated area value
15103995	01020034	0001000013241333	0001000013241333	171.516251
14531062	01020034	0001000013241335	0001000013241335	252.106247
15142430	01020034	0001000013241612	0001000013241612	101.916245
26136473	01020026	0001000013241615	0001000013241615	116.195
15031748	01020029	0001000013241646	0001000013241646	197.927505
15633077	01020032	0001000013241647	0001000013241647	118.312492
26127573	01020015	0001000013241876	0001000013241876	74.562485
15318412	01020019	0001000013241896	0001000013241896	83.800003
21440794	01020017	0001000013241902	0001000013241902	272.191254
14791692	01020034	0001000013241907	0001000013241907	165.056244
15216015	01020022	0001000013241917	0001000013241917	153.598755

Table 1: Area values derived through data association using the TOID as a common reference.

It is worth noting that the level to which the TOIDs/versions in the two datasets match up depends on the update cycles of each product. Currently, the TOID and version fields within Points of Interest are updated once a year against OS MasterMap Topography Layer. Customers can take OS MasterMap Topography Layer more frequently than PointX can update the fields within the Points of Interest product. As a result, there may be a percentage of TOIDs/versions in a customer's holdings of the products that are not the same as each other.

In some instances Points features may have the TOID value of 'Not Assigned' and TOID version of '0', which means that position of the Points of Interest feature cannot be established to a level of accuracy where it references a TOID for a building where the activity or resource takes place. Including TOIDs for features with a lesser accuracy may locate the point to an entirely different type of feature such as the road or the pavement or even an adjacent premise.

Analysis like this can be used by property and land professionals to monitor the retail space given over to certain commercial activities, monitor the change in floor-space use over time and compare city centres from across the country. This example also demonstrates the additional value derived from different datasets by using them in combination and by exploiting the typical functionality available in modern GIS and database systems.

Chapter 3 Classification

Points of Interest has its own classification system. Each Points of Interest feature is assigned to a class within the system. The classification is central to the Points of Interest dataset as it provides a hierarchical structure to the data that makes it efficient to store in a computer system and easier to search. It also provides a means of subdividing the data so that customers can order only the features they want.

The classification was created by PointX. It is designed to be comprehensive, intuitive and easy to use. It provides the necessary level of detail to be useful and flexible without being so complex that it becomes difficult to use the product in applications. There are three levels of classification: the group, the category and the class. There are nine groups at level 1. This provides the broadest categorisation.

Level 2 comprises 49 categories. Level 2 categories are broken down into over 600 classes of Points of Interest to form the third level of the classification system. This is the most specific level of classification. The full classification is given at annexe A. Over the life of the product some classes have been changed, added or merged with other classes, which is why numbers are not sequential.

Having three levels of classification enables customers to make general searches at the group level, for example, education and health, specific searches at the category level, such as primary, secondary and tertiary education, or specialist searches, such as Special schools and colleges, at the class level.

Customers can order Points of Interest at either the group or the category level. Features are allocated a classification based on either:

- a classification provided by the original data supplier; or
- where no classification is provided, PointX uses its experience and understanding of the dataset itself, or elements within it, to allocate a classification.

It is possible to map the Points of Interest classification to the Local Government Business Category List (V1) using the keyword search facility. Each feature has a classification code as part of its attribution that comprises the group, category and class numbers.

In figure 8 below, the estate agency has the following code: **02110190**

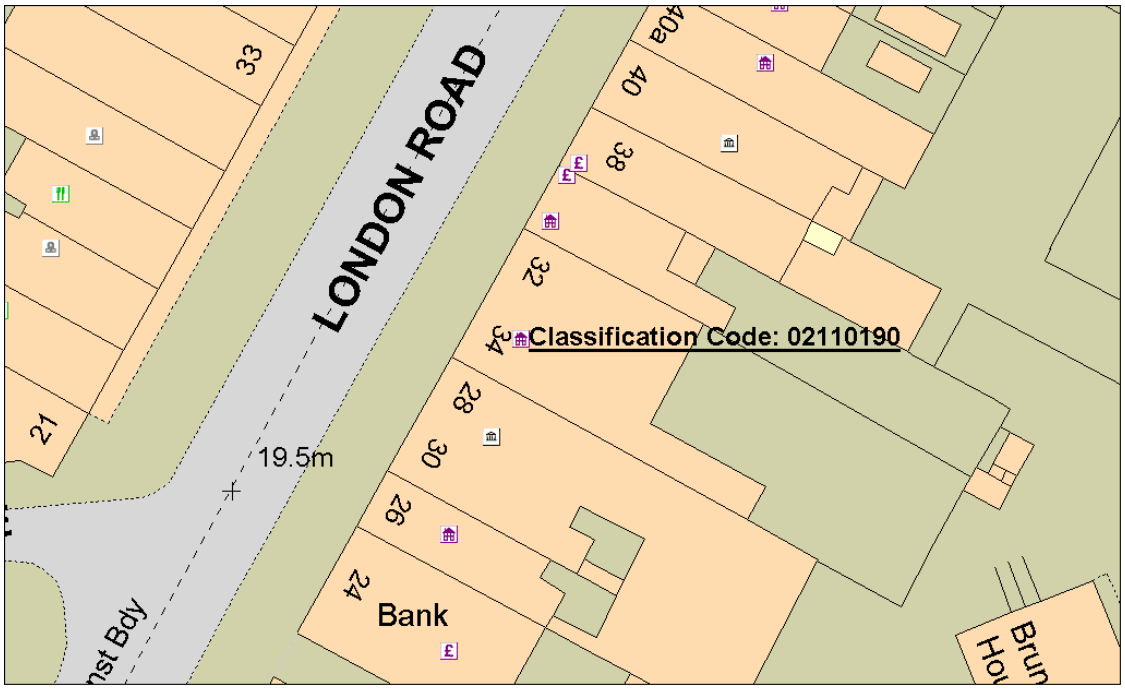

Figure 8: Classification

This breaks down as:

Group: 02 = Commercial services

Category: 11 = Property and development services

Class: 0190 = Estate agencies

This means that it easy to use GIS or database tools to search, analyse and display features based on their class. When used in conjunction with the attribution, it is possible to compile a list of the names and addresses of estate agents within a given geographic area.

Classification provides structure to the data, which helps when storing it, a way of ordering the data, a means of visualising the data and a way for customers to find the features they are interested in quickly.

The structure of Points of Interest can be described as relational in nature. Each group has one or more categories below it. Each category in turn has one or more classes related to it. This type of structure is used extensively in database management technologies as it provides a way of storing the data that reduces the amount of space the data requires and speeds up the retrieval of information. Having this classification, therefore, provides an opportunity to store the data in an efficient way.

In summary, the classification provides a twofold benefit. It breaks the data into logical groups that the customer can tailor to their own requirements and it comes in a structure that can be adapted to take advantage of modern database management techniques.

Chapter 4 Attribution

Each record is supplied with a standard set of attributes. The following section describes the nature of each of the attributes. Please note that in some cases some attributes may not be populated.

Record type

This identifies the record type and is used to facilitate updates. Currently only one value, L (load), is used. In the future, however, this may be expanded to provide more information on change.

Unique reference number (URN)

This unique numeric identifier is allocated for each record within the database. It will be retained by the record throughout its life cycle and will never be reused. In general, as only one record represents the feature, the URN will be persistent. The URN would change if a new supplier is found for that type of feature. There may be more than one supplier for any type of feature. Wherever practical, only one supplier's data will be used for any single feature, although it is not always possible to do this. A URN may also alternate when a supplier provides multiple instances of the same feature. This means that duplication is kept to minimum.

The value of a unique reference is twofold. Firstly, the most efficient way to hold this data is in a tabular form, usually within either a GIS or a database. When searching, storing, indexing and retrieving data, such technology can use unique references to speed up these processes and also increase the efficiency with which the system stores the data. Secondly, having a unique reference for a feature means any ambiguity between features that may be very alike or identical in every other respect can be removed.

TOID

This is a unique identifier provided on features within Ordnance Survey's OS MasterMap Topography Layer product. Please refer to chapter 2 for more information on the value of using the TOID. The coordinate assigned to the Points of Interest feature is compared against OS MasterMap Topography Layer and the TOID is allocated based upon where this coordinate falls. In most cases this will be within a building where the activity or resource takes place. In some instances, the position of the Points of Interest cannot be established to this level of accuracy and so the TOID field will contain the value 'Not Assigned' and the TOID version field will be '0', as the feature within which the coordinates locate the point could be an entirely different type of feature (such as the road or the pavement or even an adjacent premise). There is more information on positional accuracy in this chapter and in chapter 5 and chapter 8.

TOID version

This identifies which version of the TOID is used for each record if a TOID is assigned, but if a TOID is 'Not Assigned' then the TOID version will be '0'. Currently the TOID and versions are updated in the following manner. PointX takes a full copy of OS MasterMap Topography Layer. A process is run to update all TOIDS and versions within Points of Interest to match those in PointX's copy of OS MasterMap Topography Layer. As and when new Points of Interest features are created or amended a process is run against the full OS MasterMap copy to pick up the relevant TOIDs/versions. These created or amended features are supplied to customers in their quarterly updates. However, PointX does not take a full resupply of the latest copy of OS MasterMap Topography Layer before each Points of Interest update, so it is probable that a certain number of TOIDs/versions will be different between a customer's holding of OS MasterMap Topography Layer and their holding of Points of Interest. For more information on using the TOID and version number, please see chapter 2.

Verified address

The verified address attribute indicates the confidence with which the address attributes can be used, and its suitability for applications. The attribute has a value of either Y or N, indicating whether the provided address has been matched against Ordnance Survey address data by PointX and amended accordingly (Y), or has not been matched against Ordnance Survey address data (N). In the latter case, any information supplied by the source of the data will be included in the relevant field as outlined below.

For example, if features are supplied with only a postcode or partial postcode, the information will be included in the postcode attribute field but the verified address value will be ‘N’.

The customer ultimately must use these quality indicators to determine the appropriateness of the data for the applications in question. For example, for some applications they may only wish to use records with a verified address value of Y.

Name

This is the name of the organisation or feature provided by the data supplier, for example, Southampton General Hospital. Where the source of the data does not specify a specific name for the premise, then the activity or function is reported, based on the classification.

Address detail

For records that have an address successfully matched against Ordnance Survey address data, this attribute will contain the building name or number, with a sub-premise name and dependent thoroughfare if applicable.

For an unmatched address, any entry in this field is drawn from any location information that was provided with the data from the original supplier. Any location information contained within the source data may be used, such as a building name, but it cannot be guaranteed as being valid for the feature identified. It is therefore imperative to take the verified address attribute value into account when using other address attributes.

Street name

For records that have been successfully matched against Ordnance Survey address data this will contain the name of the thoroughfare that the feature is located on. For an unmatched address, any entry in this field is drawn from any location information that was provided with the data from the original supplier. It may or may not be the road on which the feature is located. As with any attribute that forms part of the address, always check the verified address attribute for the feature’s status.

Locality

For records that have been successfully matched, this will contain the name of the postal town in which the feature is located. For extra clarification, when an address has a locality within it, both will appear as the attribute; the locality will prefix the postal town. The two elements, locality and post town, are separated by a comma.

With an unmatched address, any available information supplied with the data may be used, but it cannot be guaranteed that it is the correct postal town. As with any attribute that forms part of the address, always check the verified address attribute for the feature’s status.

Postcode

For features that have been successfully matched, this will contain the postcode in which the feature is located. With an unmatched address, any available information supplied with the data may be used, but it cannot be guaranteed that it is the correct or full postcode. There might be no postcode supplied at all. As with any attribute that forms part of the address, always check the verified address attribute for the feature’s status.

Telephone number

Where licensed to use, this field provides telephone numbers considered to be relating to the organisation in the name field. All spaces have been removed from the number. If no number was supplied the text ‘Not supplied’ will appear. Some numbers will contain text information as well, such as where an extension has been supplied.

PointX classification code

This attribute contains an eight-digit number made up of the group, category and class numbers of the feature. This code can be looked up in the classification look-up table supplied with the product to identify the textual description associated with this eight-figure code.

Easting

This is the easting element of the record's National Grid reference. This is provided to a resolution of one metre in most cases.

Northing

This is the northing element of the records National Grid reference. This is provided to a resolution of one metre in most cases.

The coordinate attributes are used by GIS to create points in their correct National Grid position as shown in figures 1 and 2. It is not essential to use a GIS. The file format can be imported into many databases or spreadsheets as a table, although it will not be possible to view the data over a map without some spatially enabled system. For more on the supply format see chapter 5.

Date of supply

This is the release date of the data.

Positional accuracy code

This field provides an indication of the positional accuracy of the record in the form of a numeric code. This code can be used to link to the positional accuracy look-up table to identify the textual description associated with this numeric code.

In summary, all the attribution within Points of Interest builds upon the classification to provide a means of searching by function, for example, all banks, all estate agents, to searching for a business or activity that has very specific criteria, such as by name or along a street or within a particular postcode area

Chapter 5 Supply

The supply of the Points of Interest dataset is very flexible. Customers choose by geographic area and by group or category.

Geographic areas

User-defined area

Customers can define their own areas. These can be defined by supplying a list of National Grid 1-km tiles, the south-west and north-east coordinates of a bounding box or an irregular shape created in a GIS. In the case of an irregular shape, the format in which it can be supplied to Ordnance Survey needs to be agreed beforehand. On this and for further information on user-defined areas please contact Ordnance Survey's Customer Contact Centre for details.

Administrative areas

Customers can also choose to receive data for the following geographic areas/regions (as defined by the Department for Communities and Local Government):

- Great Britain
- Scotland
- Wales
- England

Government Office Regions:

- East of England
- South East
- East Midlands
- South West
- London
- West Midlands
- North East
- Yorkshire and The Humber
- North West

Other administration areas available are:

- County authorities
- District authorities
- Metropolitan districts
- Unitary authorities
- London borough councils
- Scottish authorities
- Welsh authorities

The boundaries used to define the data are those contained within Ordnance Survey Boundary-Line product. Please contact Ordnance Survey for details.

A record of the selection criteria for each customer's order is created and retained by Ordnance Survey.

The initial full supply of data contains all records within the database that are within the specified geographic area and within the selected group or category; this is what the customer will initially receive.

PointX maintains the data and re-supply the changes to Ordnance Survey regularly.

After this initial full supply, the customer will receive full re-supplies containing any updates to their selected dataset. A full re-supply has the same customer order criteria as the original full supply. Supply of updates is nominally on a quarterly basis and Ordnance Survey will use reasonable endeavours to meet this schedule. Please see the Points of Interest pages on the Ordnance Survey website for further information on release dates. The suppliers of the source data provide updates at different frequencies. For example, some may provide their new, amended or deleted features every two months whilst with others it may be every six months or only once a year. This means that the currency of the data will vary and customers may notice a time lag between a change to a building's activity on the ground and that change being reported within Points of Interest.

Ordering Points of Interest

Points of Interest can be ordered by contacting the Customer Contact Centre, through an Ordnance Survey account manager or via a form on the website.

Due to the commercially sensitive nature of some of the data, there are certain restrictions on who can order the product. For further information on these restrictions, please contact Ordnance Survey.

The order will come with the data files themselves and a number of text files containing important information regarding the data. Each file is described below.

Copyright file

The text file *POI_Copyright.txt* explains the copyright associated with the content of the order. Customers must always ensure that they adhere to the terms of their contract.

Features file

This text file contains the actual Points of Interest records ordered by the customer. The data are provided in the form of an ASCII pipe ('|') delimited (or separated) text file, with a qualifier set to double quotes for text attributes. A pipe delimiter is used, rather than the more common 'comma separated' text file or CSV, because some of the text in the attribution, particularly the address information, may contain commas. This means that if a CSV file was used, some of the data would not be in the right columns of the table. The features file contains a header row containing the field names. The name of the text file is dependent upon the order number and customer configuration. A description of the contents of this file can be found within chapter 4 on attribution. An extract from the file is given below.

```
"L"|18712384|"1000000235502642"|4|"Sewage Pumping
Station"|""|""|""|""|"N"|"06340441"|341059|354356|"31-DEC-2001"|"2"
"L"|17253291|"1000000235507425"|1|"Guide
Post"|""|""|""|""|"N"|"10550746"|341059|353909|"31-DEC-2001"|"2"
"L"|17253260|"1000000235515875"|1|"Electricity Sub
Station"|""|""|""|""|"N"|"06340433"|341078|354191|"31-DEC-2001"|"2"
"L"|22061948|"1000000235515555"|1|"Quakers
Way"|""|""|""|""|"N"|"10540732"|341120|354168|"07-FEB-2006"|"1"
```

This file format is a standard format for a text file and can easily be imported into a GIS, a database or a spreadsheet for ease of viewing.

Classification look-up file

The look-up file provides the descriptions, or values, associated with the classification code field.

In the case of the classification code field, the look-up descriptions can be found in a file called *classification_lookups.txt*. The data are provided in the form of an ASCII pipe ('|') delimited text file, with a qualifier set to double quotes.

This is an extract from the file:

```
"01010002"|"Camping, Caravanning And Mobile Homes"
"01010003"|"Guest Houses And Bed And Breakfast"
"01010005"|"Hostels"
"01010006"|"Hotels"
"01010007"|"Self Catering"
```

The customer would use this in the following manner. When looking at the attributes of the feature, the PointX classification attribute contains an eight-digit number that is the classification to level 3 of the feature. By searching for that number within this text file, the customer can find the textual description of the feature. A code value for the attribute and a look-up table are used instead of a full text description because it reduces the amount of space, and therefore the memory, needed to store and search the data, making it more efficient to use within GIS and database systems.

As with the *features.txt* file, it can easily be imported into a database table or spreadsheet to make it easier to read and query. The first row of the file, called a header row, contains the names for the columns when importing into a tabular format. Most systems would prompt to know if there is a header file when importing a text file.

Positional accuracy look-up file

The look-up file provides the descriptions, or values, associated with the positional accuracy code attribute.

The look-up file is called *postional_accuracy_lookups.txt*. The data are provided in the form of an ASCII pipe ('|') delimited text file, with a qualifier set to double quotes.

An extract from the file is shown below.

```
1|"Positioned to the address or location"
2|"Positioned to an adjacent address or location"
3|"Positioned to the road within the address or location"
4|"Positioned within the geographical locality"
```

The customer would use this in the following manner. When looking at the attributes of the feature, the positional accuracy attribute contains a value from 1–4. By searching for that number within this text file, the customer can find a textual description of the accuracy. A feature that has the value of 1 for this attribute has the highest level of positional accuracy, and a value of 4 is the lowest. The textual descriptions of the value, given above, indicate the actual positioning, so a value of 1 would indicate that the point has been matched to an address and its building whilst a value of 3, for example, would indicate that the point has been located to a road but not to the correct location on the road. As with the verified address field, it is important to consider this value when performing searches and queries. For example, a customer may wish to exclude all features that have a value other than 1, if only features that have a full address and have been assigned to a particular topographic feature best serve the purpose of the application.

A code value for the attribute and a look-up table are used instead of a full text description because it reduces the amount of space, and therefore the memory, needed to store and search the data, making it more efficient to use within GIS and database systems.

As with the features file, it can easily be imported into a database table or spreadsheet to make it easier to read and query. The first row of the file, called a header row, contains the names for the columns when importing into a tabular format. Most systems would prompt to know if there is a header file when importing a text file.

Completeness file

The text file *completeness.txt* provides, for each category down to the category level, an estimate of the number of Points of Interest available as a percentage of the total in mainland Great Britain. The data are provided in the form of an ASCII pipe ('|') delimited text file, with a qualifier set to double quotes. The file contains a header row containing the field names. PointX is continually striving to augment its data holding to ensure the maximum coverage of records.

The values given range from 1–5, which equate to the percentages shown below:

```
1 Between 0 and 20% complete
2 Between 21 and 40% complete
3 Between 41 and 60% complete
4 Between 61 and 80% complete
5 Between 81 and 100% complete
```

An example from the file is:

```
"10"|"Transport"|"53"|"Air"|5
```

This means that in group 10 (Transport), the category for 'Air' transport has a value of 5, making it between 81% and 100% complete. As with the features file, it can easily be imported into a database table or spreadsheet to make it easier to read and query.

The completeness range assigned to a class is an estimate based on PointX's experience of compiling the data and knowledge of what information is available, or not available, within the marketplace. It is therefore advised that customers use the value as an indicative measure, rather than an absolute measure, of completeness. The 'completeness' of a category also varies across the country; in some areas there may be very comprehensive data on a specific activity and in others there may be very little data available on that same activity. It is imperative that customers look at the completeness value for the category and assess for themselves whether that category is complete enough for the intended applications.

Keyword search file

Customer feedback had indicated that users of PointX data would benefit from having access to additional documentation that showed both where within the classification system certain features are held and, additionally, uses strings or keywords compatible with systems already in place to do this.

As an initial step for linking up with existing systems, the keyword list terms held in the Local Government Business Category List (LGBCL) version 1.00 have so far been classified and provided in the *Keywords.txt* file. It is an ASCII pipe ('|') delimited text file with no text qualifiers, unlike the look-up files.

An extract from the keyword search file is given below:

```
Books|||||674|599||||
Bowling alleys|||||290|||||
Bowls clubs|||||290|||||
Bread and flour||47|||528|524||||
Brewery|||||522|||||
```

As with the features file, it can easily be imported into a database table or spreadsheet to make it easier to read and query. The first row of the file, called a header row, contains the names for the columns when importing into a tabular format. Most systems would prompt to know if there is a header file when importing a text file.

There is also supporting documentation in the form of the file *Keywords Documentation.pdf*. This explains how to use the keyword file and provides an example of how to read the relevant group, category or class from the table.

More information on the LGBCL, including a downloadable copy of the list, can be found on its website.

SIC search file

Customer feedback had indicated that users of PointX data would benefit from knowing how the Points of Interest classes relate to the SIC (Standard Industrial Classification) codes.

As an initial step for linking up with existing systems, the SIC list terms held in the SIC 2003 classification have so far been classified and provided in the *POI_Class_To_SIC_Lookup.txt* file. It is an ASCII pipe ('|') delimited text file similar to the *Keywords.txt* file.

An extract from the SIC search file is given below:

```
04220277|Amusement Parks and Arcades|9271|9272|9233|||||9200|9321||||||
04220278|Bingo Halls|9271|||||||9200||||||
04220279|Bookmakers|9271|||||||9200||||||
04220280|Casinos|9271|||||||9200||||||
04220281|Pools Promoters|9271|||||||9200||||||
```

As with the features file, it can easily be imported into a database table or spreadsheet to make it easier to read and query. The first row of the file, called a header row, contains the names for the columns when importing into a tabular format. Most systems would prompt to know if there is a header file when importing a text file.

There is also supporting documentation in the form of the file *SIC_Documentation_Sep07.pdf*. This explains how to use the SIC file and provides an example of how to read the relevant class from the table.

Descriptive Class reporting file

This is a PDF document and relates to the 'class' level of the Points of Interest Classification. The document provides a description of the class and, where available or appropriate, a selection of brand names associated with the class. The purpose of the document is to help customers identify what the activities, businesses or facilities a class contains. Below shows the entry for the class 02060085 - Civil Engineers, which includes a description (in bold italics) and a selection of brand names (normal italics):

02060085
"Civil Engineers"
Civil Engineer, Consulting Engineer, Drainage Contractor, Flood Control, Pile Driving, Water Engineer
Atkins, Edmund Nuttall Ltd, Faber Maunsell, Jacob Babtie, Halcrow Group Ltd, Mott Macdonald, Mouchel Parkman, Royal Haskoning, Sir Robert McAlpine Ltd

Notes on the background of data suppliers

This is a PDF document that provides further information on the suppliers PointX uses to create Points of Interest.

Media formats

Points of Interest is supplied on either CD or DVD. The current size of a fully supply is 160 Mb (compressed) or 455 Mb (uncompressed). A full supply will fit on a single CD. If at some future point the dataset exceeds the capacity of a CD, DVD will become the preferred media.

Chapter 6 Pricing and licensing

Ordnance Survey can license (subject to agreement and some restrictions that may apply) Points of Interest to organisations for internal and non-commercial Internet uses. Ordnance Survey can also license the data to companies wishing to provide commercial services. Please contact Ordnance Survey to discuss commercial licensing for Points of Interest.

A number of factors are used to determine Points of Interest licence pricing. These are described below.

Terminals

The minimum number of terminals that can be licensed is five. Licences are priced partly by the number of terminals on which the data are to be used. Where more than five terminals are required, a sliding scale of prices is used to determine the terminal element in a licence price.

- 5 Minimum base price.
- 6–15 Minimum base price but for 10 users. This effects a discounted rate for the 6th to 15th user, whereby the price for those users is halved.
- 16–25 Half minimum base price but for ten users. This effects a discounted rate for the 16th to 25th user, whereby the minimum base price for those users is quartered.

Term

Licences are available for one, two or three years. Discounts are applied for two- and three-year terms.

Licence rights

Licences are available for internal business use (IBU) and non-commercial Internet services (NCIS). Full details of licence rights are detailed in licence drafts, which are available from Ordnance Survey.

Classification

Customers can license the use of Points of Interest at either group or category level. Diagram 1 below shows the classification hierarchy. For example, a customer interested in transport data would order the Transport group. A customer interested in modes of air transport can order the category and would receive everything under category 53 ‘Aeronautical features, Airports and landing strips and helipads’.

A customer interested in just helipads, however, would need to order category 53 as well because at the time of writing it is not possible to license individual classes of Points of Interest data. It is possible to mix and match combinations of data based on group and category level. The customer that ordered all of Transport may also wish to order the category 49, Motoring, from the group Retail (09), which would provide car retailing information such as car sale rooms.

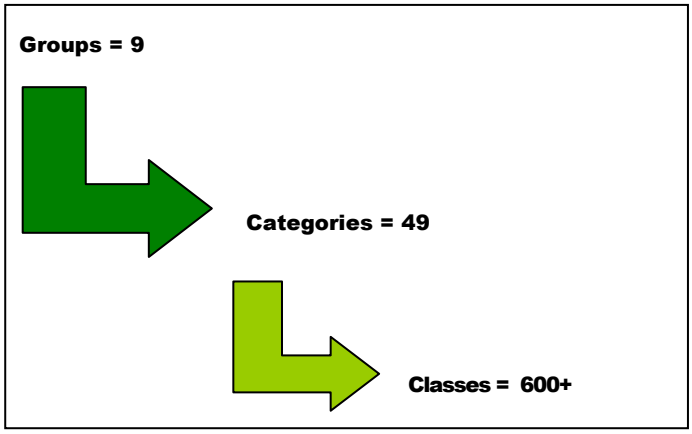

Diagram 1: The classification hierarchy

Geographic extent

Points of Interest can be licensed across either predetermined and known extents (to suit government and other customers – for example, West Berkshire, Scotland or Great Britain) or to customer-bespoke extents. A customer can also have different geographic areas within the same order.

Chapter 7 Styling

Points of Interest is completely customisable in terms of the way a customer chooses to symbolise the points. The way in which the data appears on a screen is likely to be a combination of the wishes of the customer and the functionality of the system being used to display the points. The simplest way is to render all points with a single colour and as a single shape, as in figure 9 below.

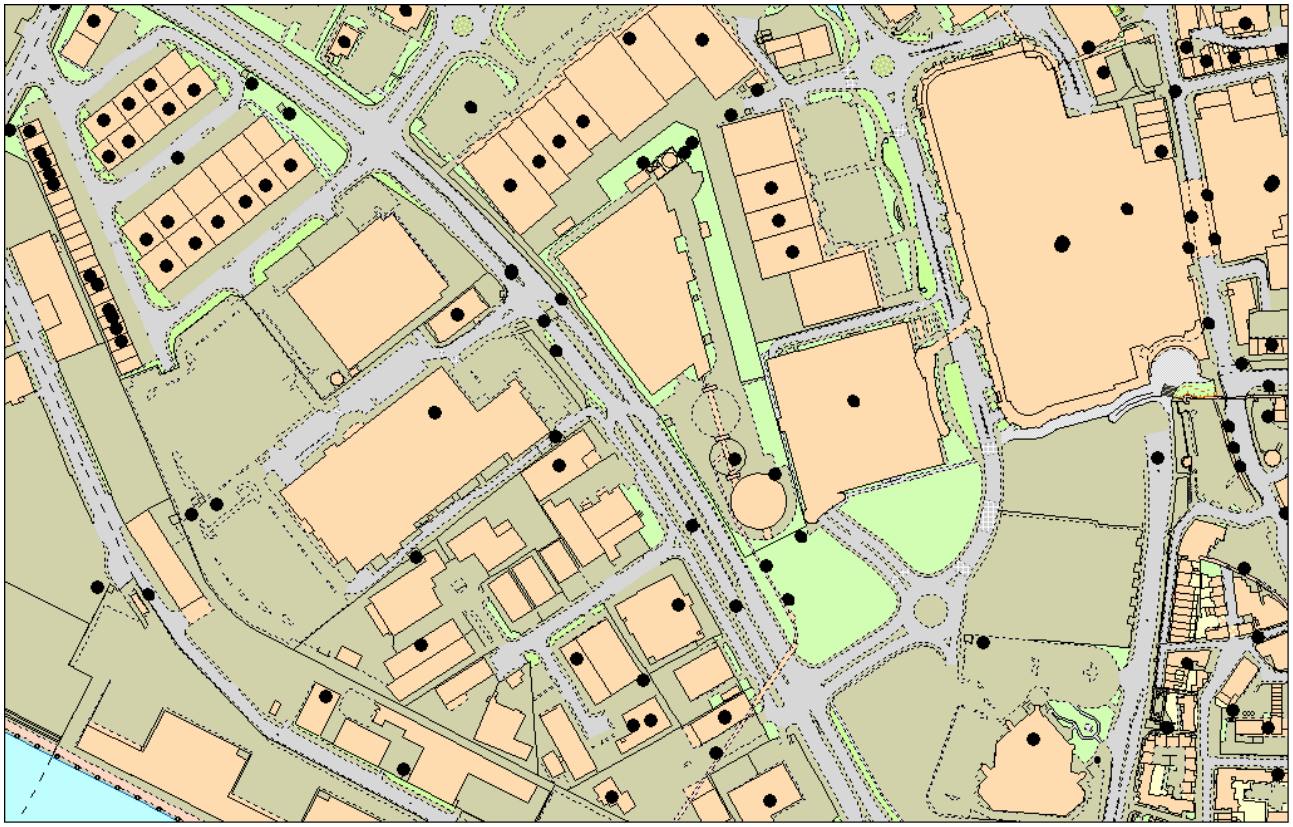

Figure 9: Points of Interest with a single symbol

Many GIS have tools that provide many options for rendering data on screen. The availability of such choice can make the development of a style guide for a dataset a time-consuming task. To that end, Ordnance Survey has developed a set of symbols to use with the Points of Interest dataset so that customers can render the data very quickly. These are available free from Ordnance Survey and can be used within most GIS. The symbols are based on the level 2 classification. This symbolisation has been used to produce the other figures in this document.

Using a symbol set that makes use of the level of category means that the viewer can understand the information quickly. Compare figure 9 above with figure 10 below, showing Points of Interest data rendered with the supplied symbols. It is possible to get an idea of the range and type of features that are in this area without querying the attribution.

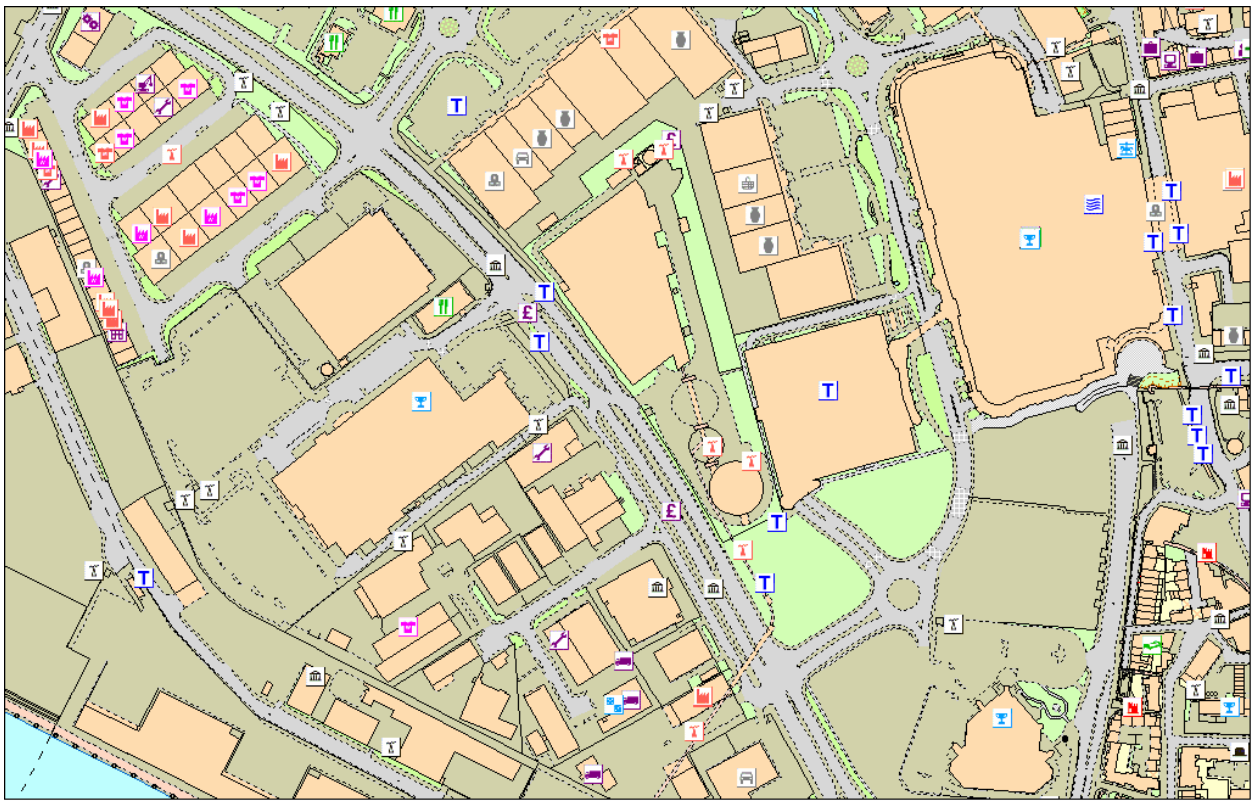

Figure 10: Points of Interest with symbology

The symbol set is supplied in:

- Black and white bitmaps
- Colour bitmaps
- True type font

Table 2 illustrates the colour symbols used for each of the 49 categories.

Points of Interest symbology

01 Accommodation, eating and drinking		**05 Education and health**	
01 Accommodation		26 Animal welfare	
02 Eating and drinking		27 Education support services	
		28 Health practitioners and establishments	
02 Commercial services		29 Health support services	
03 Construction services		31 Primary, secondary and tertiary education	
04 Consultancies		32 Recreational and vocational education	
05 Employment and career agencies			
06 Engineering services		**06 Public infrastructure**	
07 Hiring and contract services		33 Central and local government	
08 IT, advertising, marketing and media services		34 Infrastructure and facilities	
09 Legal and financial		35 Organisations	
10 Personal, consumer and other services			
11 Property and development services		**07 Manufacturing and production**	
12 Recycling services		37 Consumer products	
13 Repair and servicing		38 Extractive industries	
14 Research and design		39 Farming	
15 Transport, storage and delivery		40 Foodstuffs	
		41 Industrial features	
03 Attractions		42 Industrial products	
16 Botanical and zoological			
17 Historical and cultural		**09 Retail**	
18 Recreational		46 Clothing and accessories	
19 Landscape features		47 Food and drink and multi item retail	
20 Tourism		48 Household, office, leisure and garden	
		49 Motoring	
04 Sport and entertainment			
21 Entertainment support services		**10 Transport**	
22 Gambling		53 Air	
23 Outdoor pursuits		54 Road and rail	
24 Sports complex		55 Walking, riding and cycling	
25 Venues, stage and screen		56 Water	
		57 Transport Access Points	

Table 2: Colour symbols for Points of Interest

Chapter 8 Data sources and data measures

Supplier data are supplied to PointX in a wide variety of formats. Some of the data are supplied without grid references and efforts are made to geocode this data by identifying a grid reference for each record.

Positional accuracy

Ordnance Survey data and specialised geocoding software is used to achieve this and to provide a confidence level indicator of positional accuracy for each record. Data that cannot be given coordinates due to insufficient location or address detail are not included.

The positional accuracy falls into one of the following categories:

- Positioned to the location or address.
- Positioned to an adjacent location or address.
- Positioned to the road within the address or location.
- Positioned within the geographic locality.

Typically: The majority of records are positioned on or adjacent to the address or location of the feature.

A very small proportion of records are positioned to the road within the address or location or within the geographic locality of the feature. This is used only for ATMs (cash machines) and public telephones, where the data is sourced from a single authoritative and non-duplicated source.

All geometries are represented as points. If the positional accuracy is stated as '1' (see chapter 5) the coordinates should fall within the footprint of the real-world feature in question, typically a building or structure.

Where the positional accuracy is stated as '2' the coordinates will either be placed centrally in the text that relates to the feature – and may be within the extent of the feature – or will be positioned close to the true location of a part of the feature. In practice, it will probably be within 10 metres of either the feature or an edge of the feature's geographic extent, although this cannot be guaranteed.

A positional accuracy of '3' indicates that the coordinates are placed centrally on the correct road. As road lengths vary and the central position could be very near or a long way from the true location on the road, it is difficult to say exactly how far these instances might be shown from their true location. In the majority, it is to be expected that the assigned coordinate could be up to a kilometre away, with a small number being even farther.

A positional accuracy of '4' means that the location assigned is in the correct geographic locality, such as the right village or industrial estate, and that it has not been possible to locate to a specific relevant road. Depending on how big the geographic locality in question is, the record's true location could in reality be up to a few kilometres from the reported coordinates.

It is very important that customers take the positional accuracy value of the feature into account when using it in applications.

Addressing

The data contains both addressable and non-addressable records. Structured address information is only provided for those records that are addressable and can be successfully matched against Ordnance Survey data. Records that have not been successfully matched will not necessarily have structured address information supplied in the output.

Unique referencing

Records have been attributed with both a TOID and TOID version, which have been directly derived from area features within the OS MasterMap Topography Layer based on the grid reference of the feature. There will be a very small number of features where a TOID value will not be provided because the feature does not sit within the correct OS MasterMap Topography Layer polygon and these will have a TOID value of 'Not Assigned' and a TOID version of '0'.

Classification

PointX relies upon over 170 data suppliers to provide the initial classification of each of the records. This is then used to allocate the appropriate class to the feature. This can lead to cases where different classes are applied to the same real-world feature, dependent upon the base classification used by the different data suppliers. As part of the production process for the current product involves the removal of multiple instances of what is believed to be the same feature, it is possible that individual instances of what are, in fact, the same type of feature can be reported in different classes.

Completeness

Most Points of Interest categories are between 81% to 100% complete. The completeness of the dataset is improved and maintained through:

- use of the most definitive sources for the data wherever possible;
- rigorous update cycles; and
- customer feedback.

Annexe C gives the completeness ranges by POI classification code.

Field checking, postcode recoding, quality audits, and customer feedback are used to check that the attributes have the correct type of information, so that, for example, the easting and northing attributes have coordinates, not text. The checking is done on a monthly or quarterly basis. More information on completeness is given in chapter 5.

Sources of data

There are two main sources of data that provide approximately 80% of the Points of Interest features. The authoritative source for a type of feature is used to build the dataset where possible. More than 170 suppliers are used to create the data set. Annexe B lists all the suppliers and indicates their level of contribution to the dataset.

Annexe A Classification system (v2.3)

The classification scheme has three levels of information.

- There are 9 groups at level 1 and each group is numbered 01–10. Numbering is not sequential.
- There are 49 categories at the second level, numbered 01–57. Numbering is not sequential.
- These are broken down into over 600 classes of Points of Interest at the third level.

Customers can select Points of Interest from the group and category level.

01 Accommodation, eating and drinking

01 Accommodation
02 Eating and drinking

02 Commercial Services

03 Construction services
04 Consultancies
05 Employment and career agencies
06 Engineering services
07 Hiring and contract services
08 IT, advertising, marketing and media services
09 Legal and financial
10 Personal, consumer and other services
11 Property and development services
12 Recycling services
13 Repair
14 Research and design
15 Transport, storage and delivery

03 Attractions

16 Botanical and zoological
17 Historical and cultural
18 Recreational
19 Scenic features
20 Tourism

04 Sport and entertainment

21 Entertainment support services
22 Gambling
23 Outdoor pursuits
24 Sports complex
25 Venues, stage and screen

05 Education and health

26 Animal welfare
27 Education support services
28 Health practitioners
29 Health support services
30 Medical establishments
31 Primary, secondary and tertiary education
32 Recreational and vocational education

06 Public infrastructure

33 Central and local government
34 Infrastructure support
35 Organisations
36 Publicly accessible facilities

07 Manufacturing and production

37 Consumer products
38 Extractive industries
39 Farming
40 Foodstuffs
41 Industrial features
42 Industrial products

09 Retail

46 Clothing and accessories
47 Food and drink
48 Household, leisure and garden
49 Motoring
50 Multi-item retail
51 Niche goods
52 Office, IT and electrical

10 Transport

53 Air
54 Road and rail
55 Walking, riding and cycling
56 Water
57 Transport access points

01 Accommodation, eating and drinking

01 Accommodation

0002 Camping, caravanning, mobile homes, holiday parks and centres

0003 Guest houses and bed and breakfast

0005 Hostels

0006 Hotels, motels, country houses and inns

0007 Self catering

0008 Timeshare

0009 Youth hostels and other youth accommodation

02 Eating and drinking

0010 American restaurants

0012 Banqueting and function rooms

0013 Cafes, snack bars and tea rooms

0014 Caribbean restaurants

0015 Chinese and oriental restaurants

0017 English restaurants

0018 Fast food and takeaway outlets

0019 Fast food delivery services

0020 Fish and chip shops

0021 Fish and seafood restaurants

0022 French restaurants

0023 Greek restaurants

0024 Indian and Asian restaurants

0025 Internet cafes

0026 Italian restaurants

0027 Japanese restaurants

0028 Lebanese restaurants

0029 Mediterranean restaurants

0030 Mexican restaurants

0032 Pizza restaurants

0033 Pub food restaurants

0034 Pubs, bars and inns

0035 Roadside restaurants

0036 Russian restaurants

0038 Spanish restaurants

0040 Thai restaurants

0041 Turkish restaurants

0042 Vegetarian restaurants

0043 Restaurants unspecified

02 Commercial services

03 Construction services

0779 Building and component suppliers

0045 Building contractors

0046 Construction completion services

0047 Construction plant

0048 Cutting, drilling and welding services

0049 Demolition services

0050 Diving services

0051 Electrical contractors

0778 Fencing and dry stone walling services

0052 Garden maintenance services

0053 Glaziers

0044 Metalworkers including blacksmiths

0054 Painting and decorating services

0055 Plasterers

0056 Plumbing and heating services

0057 Pool and court construction

0058 Restoration and preservation services

0059 Road construction services

0060 Roofing and chimney services

04 Consultancies

0063 Architectural and building-related consultants
0064 Business-related consultants
0065 Computer consultants
0066 Construction service consultants
0067 Feng shui consultants and furnishers
0068 Food consultant
0069 Image consultants
0070 Interpretation and translation consultants
0071 Security consultants
0072 Telecommunications consultants
0074 Traffic management and transport related consultants

05 Employment and career agencies

0075 Careers offices
0076 Domestic staff and home help
0077 Driver agencies
0078 Employment agencies
0079 Modelling and theatrical agencies
0081 Nursing agencies
0082 Recruitment for armed forces

06 Engineering services

0083 Aviation engineers
0084 Chemical engineer
0085 Civil engineers
0086 Electrical and electronic engineers
0087 Hydraulic engineers
0088 Industrial engineers
0089 Instrumentation engineers
0090 Marine engineers and services
0091 Mechanical engineers
0092 Pneumatic engineers
0093 Precision engineers
0094 Structural engineers

07 Hiring and contract services

0095 Agricultural contractors
0096 Aircraft charters
0097 Boat hiring services
0098 Catering services
0099 Construction and tool hire
0100 Contract cleaning services
0101 Display and window dressers
0102 Drain and sewage clearance
0103 Hotel booking agencies
0104 Leisure equipment hiring
0105 Linen hire and washroom services
0107 Office services
0108 Packers
0109 Pest and vermin control
0110 Renting and leasing of personal and household goods
0111 Sound, light and vision service and equipment hire
0112 Ticket agents
0113 Vehicle hire and rental

08 IT, advertising, marketing and media services

0114 Advertising services
0115 Artists, illustrators and calligraphers
0116 Computer security
0117 Computer systems services
0118 Concert/exhibition organisers and services
0119 Database services
0120 Desktop publishing services
0121 Electronic and internet publishers
0122 Film and video services
0123 General computer services
0124 Internet services
0125 Literary services
0126 Mailing and other information services
0127 Marketing services
0128 Plate makers, print finishers and type setters
0129 Press and journalism services
0130 Printing and photocopying services
0131 Recording studios and record companies
0133 Telephone, telex and fax services
0134 Television and radio services

09 Legal and financial

0135 Accountants and auditors
0137 Auctioneers, auction rooms and valuers
0141 Cash machines
0142 Cheque cashing
0795 Commodity dealers
0143 Company registration and trademarks
0144 Copyright and patent
0145 Credit reference agencies
0140 Currency conversion and money transfers
0146 Debt collecting agencies
0147 Financial advice services
0138 Financial institutions
0796 Franchise and holding company services
0148 Fundraising services
0149 Insurers and support activities
0150 Mortgage and financial lenders
0151 Pawnbrokers
0154 Solicitors, advocates and notaries public
0773 Stocks, shares and unit trusts

10 Personal, consumer and other services

0155 Astrologers, clairvoyants and palmists
0156 Barbers and hairdressers
0157 Beauty salons and beauty services
0158 Cleaning services
0159 Clothing hire
0160 Customer service centres
0161 CV writers
0162 Detective and investigation agencies
0165 Funeral and associated services
0167 Headquarters, administration and central offices
0166 Historical research
0169 Introduction and dating agencies
0170 Lock, key and security services
0171 Message and greeting services
0173 Motoring organisations
0774 Musicians and composers
0174 Party organisers
0175 Personalisation
0177 Photographic services
0775 Sculptors, wood workers and stone masons
0793 Shoe repairs
0179 Sports services
0776 Tailoring and clothing alteration
0180 Tattooing and piercing services
0182 Trophies and engraving services
0777 Vehicle breakdown and recovery services
0183 Vehicle cleaning services
0185 Weather services
0186 Wedding services
0187 Wheel clampers
0188 Window cleaners

11 Property and development services

0189 Commercial property letting
0191 Estate and property management
0194 Property development services
0195 Property information services
0192 Property letting
0190 Property sales

12 Recycling services

0199 Clearance and salvage dealers
0198 Rag merchants
0196 Recycling, reclamation and disposal
0200 Scrap metal merchants
0201 Vehicle breakers
202 Waste paper merchants

13 Repair and servicing

0204 Building repairs
0205 Electrical equipment repair and servicing
0206 Household repairs
0207 Industrial repairs and servicing
0209 Service industry equipment repairs
0210 Sports and leisure equipment repair
0211 Tool repairs
0212 Vehicle repair and servicing

14 Research and design

0214 Design services

0216 Research services

0217 Testing and analysis services

15 Transport, storage and delivery

0218 Airlines and airline services

0219 Animal transportation

0221 Container and storage

0222 Courier, delivery and messenger

0223 Distribution and haulage

0224 Ferry and cruise companies

0025 Import and export services

0227 Railway companies and information

0228 Removals and shipping agents

0230 Taxi services

03 Attractions

16 Botanical and zoological

0231 Aquaria

0232 Bird reserves and sanctuaries

0233 Butterfly farms

0235 Farm based attractions

0236 Horticultural attractions including designated parks and reserves

0237 Salmon ladders

0239 Zoos and animal collections

17 Historical and cultural

0240 Archaeological sites

0241 Battlefields

0245 Historic and ceremonial structures

0244 Historic buildings including castles, forts and abbeys

0246 Historical ships

0248 Museums and art galleries

18 Recreational

0252 Commons

0253 Country parks

0254 Picnic areas

0255 Playgrounds

19 Landscape features

0251 Bodies of water

0257 Designated scenic features

0259 Trigonometric points

20 Tourism

0263 Laseria and planetaria

0264 Model villages

0265 Railways (heritage, steam and miniature)

0267 Sightseeing, tours, viewing and visitor centres

0266 Theme and adventure parks

0268 Tourist information centres

0269 Unspecified attractions

04 Sport and entertainment

21 Entertainment support services

0270 Bouncy castle hire

0271 Children's activity centres

0273 Entertainment services

0274 Firework displays

0275 Funfair services

0276 Mobile discos

22 Gambling

0277 Amusement parks and arcades
0278 Bingo halls
0279 Bookmakers
0280 Casinos
0281 Pools promoters

23 Outdoor pursuits

0282 Angling and sports fishing
0283 Combat, laser and paintball games
0284 Hot air ballooning
0770 Outdoor pursuit organisers and equipment
0285 Parachuting and bungee jumping
0286 Paragliding and hang gliding
0321 Riding schools, livery stables and equestrian centres
0287 Water sports

24 Sports complex

0288 Archery facilities
0289 Athletics facilities
0290 Bowling facilities
0291 Climbing facilities
0292 Golf ranges, courses and clubs
0293 Gymnasiums, sports halls and leisure centres
0294 Ice rinks
0297 Motor sports
0298 Racecourses and greyhound tracks
0299 Shooting facilities
0300 Ski slopes
0301 Snooker and pool halls
0302 Sports grounds, stadiums and pitches
0303 Squash courts
0304 Swimming pools
0305 Tennis facilities
0306 Velodromes

25 Venues, stage and screen

0308 Cinemas
0762 Conference and exhibition centres
0311 Discos
0312 Nightclubs
0314 Social clubs
0315 Theatres and concert halls

05 Education and health

26 Animal welfare

0316 Animal clipping and grooming
0317 Dog training
0318 Horse training
0319 Kennels and catteries
0320 Pet cemeteries and crematoria
0322 Veterinarians
0323 Veterinary pharmacies

27 Education support services

0324 Education authorities
0325 Education services
0326 Examination boards
0799 Playing for success centres
0800 Secure units

28 Health practitioners and establishments

0780 Accident and emergency hospitals
0330 Alternative, natural and complementary
0364 Chemists and pharmacies
0333 Chiropodists
0365 Clinics and health centres
0367 Dental laboratories
0368 Dental surgeries
0335 Dental technicians
0337 Dieticians and nutritionists
0369 Doctors surgeries
0340 Homeopaths
0370 Hospices
0371 Hospitals
0372 Mental health centres and practitioners
0342 Midwives
0373 Nursing and residential care homes
0344 Optometrists and opticians
0345 Physical therapy
0352 Speech therapists
0354 Surgeons and cosmetic surgeries

29 Health support services

0356 Ambulance services
0357 Blood transfusion service
0358 Counselling and advice services
0359 Health authorities
0106 Medical equipment rental and leasing
0361 Medical waste disposal services
0362 Pregnancy testing services
0363 X-ray services

31 Primary, secondary and tertiary education

0379 Broad age range and secondary state schools
0375 First, primary and infant schools
0376 Further education establishments
0381 Higher education establishments
0377 Independent and preparatory schools
0801 Pupil referral units
0380 Special schools and colleges
0382 Unspecified and other schools

32 Recreational and vocational education

0384 Ballet and dance schools
0385 Beauty and hairdressing schools
0388 Diving schools
0389 Drama schools
0390 Driving and motorcycle schools
0391 First aid training
0392 Flying schools
0394 Language schools
395 Martial arts instruction
0396 Music teachers and schools
0397 Nursery schools and pre and after school care
0399 Sailing schools
0400 Sports and fitness coaching
0401 Sunday schools
0403 Training providers and centres

06 Public infrastructure

33 Central and local government

0404 Armed services
0407 Coastguard stations
0408 Consular services
0409 Courts, court services and tribunals
0411 Driving test centres
0412 Embassies and consulates
0414 Fire brigade stations
0415 Government agencies and offices
0419 Members of parliament and members of European parliament
0422 Police stations
0424 Prisons
0425 Probation offices and police support services
0426 Registrars offices
0429 Social service activities

34 Infrastructure and facilities

0453 Allotments
0454 Cemeteries and crematoria
0455 Drinking fountains
0433 Electrical features
0435 Fire safety features
0437 Gas features
0456 Halls, day and community centres
0457 Letter boxes
0458 Libraries
0438 Meteorological features
0459 Places of worship
0460 Public telephones
0461 Public toilets
0462 Recycling centres
0440 Refuse disposal facilities
0427 Rescue infrastructure
0442 Telecommunications companies
0443 Telecommunications features
0444 Utility companies and brokers
0463 Vicarages, rectories and church buildings
0441 Waste storage, processing and disposal
0802 Wifi Hotspots

35 Organisations

0769 Community networks and products
0446 Fan clubs, voluntary organisations, charities and trusts
0448 Institutes and professional organisations
0449 Political parties
0450 Religious organisations
0447 Sports clubs and associations
0452 Youth organisations

07 Manufacturing and production

37 Consumer products

0464 Baby and nursery equipment
0790 Bathroom fixtures, fittings and sanitary equipment
0465 Beds and bedding
0466 Brushes
0467 Candles
0468 Canvas goods
0470 Carpets, flooring, rugs and soft furnishings
0472 China and glassware
0473 Clothing, components and accessories
0785 Conservatories
0474 Cookers and stoves – non electrical
0475 Cosmetics, toiletries and perfumes
0476 Curtains and blinds
0477 Cutlery and tableware
0478 Disability and mobility equipment
0486 Disposable products
0479 Domestic appliances
0782 Fireplaces and mantelpieces
0480 Footwear
0481 Furniture
0482 Garden goods
0483 Giftware
0485 Hobby, sports and pastime products
0487 Jewellery, gems, clocks and watches
0488 Lampshades and lighting
0489 Leather products
0490 Lingerie and hosiery
0491 Luggage, bags, umbrellas and travel accessories
0471 Medals, trophies, ceremonial and religious goods
0493 Musical instruments
0494 Photographic and optical equipment
0495 Saunas and sun beds
0497 Tents and camping equipment
0498 Tobacco products

38 Extractive industries

0500 Coal mining

0501 Oil and gas extraction, refinery and product manufacture

0502 Ore mining

0503 Peat extraction

0504 Sand, gravel and clay extraction and merchants

0506 Stone quarrying and preparation

0507 Unspecified quarries or mines

39 Farming

0508 Animal breeders (not horses)

0509 Arable farming

0510 Bee keepers

0511 Dairy farming

0512 Fish and shellfish

0513 Forestry

0514 Fruit, flower and vegetable growers

0515 Hoppers and silos

0516 Horse breeders and dealers

0517 Livestock farming

0518 Mixed or unspecified farming

0520 Poultry farming, equipment and supplies

0521 Sheep dips and washes

40 Foodstuffs

0522 Alcoholic drinks

0523 Animal feeds, pet foods, hay and straw

0524 Baking and confectionery

0530 Catering and non-specific food products

0525 Dairy products

0526 Fish, meat and poultry products

0528 Milling, refining and food additives

0529 Non-alcoholic drinks

41 Industrial features

0531 Business parks and industrial estates

0532 Chimneys

0533 Conveyors

0534 Energy production

0535 Lighting towers

0536 Lime kilns

0537 Oast houses

0538 Pipelines

0539 Tanks (generic)

0540 Travelling cranes and gantries

0542 Unspecified works or factories

0543 Water pumping stations

42 Industrial products

0544 Abrasive products and grinding equipment

0783 Access equipment

0545 Adhesives and sealants

0546 Aeroplanes

0547 Agricultural machinery and goods

0548 Air and water filtration

0549 Arms and ammunition

0550 Bearing, gear and drive elements

0551 Beekeeping supplies

0553 Bricks, tiles, clay and ceramic products

0555 Cable, wire and fibre optics

0784 Car ports and steel buildings

0557 Colours, chemicals and water softeners and supplies

0558 Cleaning equipment and supplies

0580 Lifting and handling equipment

0581 Lubricants and lubricating equipment

0582 Marine equipment including boats and ships

0583 Measurement and inspection equipment

0584 Medical equipment, supplies and pharmaceuticals

0585 Metals manufacturers, fabricators and stockholders

0586 Moulds, dies and castings

0588 Office and shop equipment

0589 Ovens and furnaces

0590 Packaging

0591 Paints, varnishes and lacquers

0594 Pesticides

0598 Printing related machinery

0599 Published goods

0562 Concrete products
0563 Cooling and refrigeration
0765 Educational equipment and supplies
0564 Electrical components
0565 Electrical motors and generators
0566 Electrical production and manipulation equipment
0567 Electronic equipment
0568 Electronic media
0569 Engines
0781 Fences, gates and railings
0571 Fertilisers
0572 Food and beverage industry machinery
0573 General construction supplies
0574 General purpose machinery
0575 Glass
0788 Glass fibre services
0576 Horticultural equipment
0767 Ice
0577 Industrial coatings and finishings
0600 Pumps and compressors
0601 Radar and telecommunications equipment
0602 Road maintenance equipment
0603 Ropes, nets and cordage
0604 Rubber and plastics
0605 Seals, tapes, taps and valves
0791 Shelving, storage, safes and vaults
0606 Signs
0607 Special purpose machinery and equipment
0609 Stationery, stamps, tags and labels
0608 Textiles, fabrics, silk and machinery
0579 Tools including machine shops
0612 Unspecified manufacturing
0615 Vehicles
0613 Vehicle bodybuilders
0614 Vehicle components
0787 Waste collection, processing and disposal equipment
0616 Wood products including charcoal, paper, card and board
0617 Work wear

09 Retail

46 Clothing and accessories

0797 Baby and nursery equipment and children's clothes
0656 Clothing
0657 Footwear
0659 Jewellery and fashion accessories
0660 Lingerie and hosiery

47 Food, drink and multi item retail

0671 Alcoholic drinks including off licences and wholesalers
0661 Bakeries
0662 Butchers
0768 Cash and carry
0663 Confectioners
0699 Convenience stores
0665 Delicatessens
0666 Fishmongers
0667 Frozen foods
0702 General stores
0668 Green and new age goods
0669 Grocers, farm shops and pick your own
0670 Herbs and spices
0703 Livestock markets
0705 Markets
0706 Newsagents and tobacconists
0672 Organic, health and kosher foods
0709 Supermarkets
0798 Tea and coffee merchants

48 Household, office, leisure and garden

0711 Adult goods

0712 Art and antiques

0674 Books and maps

0693 Camping and caravanning

0675 Carpets, rugs, soft furnishings and needlecraft

0714 Charity shops

0676 China and glassware

0720 Computer supplies

0677 Cosmetics, toiletries, perfumes and hairdressing supplies

0678 Craft supplies

0679 Cycles and accessories

0700 Department stores

0701 Discount stores

0680 DIY and home improvement

0721 Domestic appliances

0722 Electrical goods and components

0716 Florists

0682 Furniture

0766 Fuel distributors and suppliers

0764 Garages, garden and portable buildings

0683 Garden centres and nurseries

0684 Garden machinery and furniture

0685 General household goods

0717 Gifts and cards

0686 Hobby, sports and pastime products

0687 Leather goods, luggage and travel accessories including handbags

0688 Lighting

0704 Mail order and catalogue stores

0689 Music and video

0690 Musical instruments

0723 Office and shop equipment

0718 Party goods and novelties

0691 Pets and pet supplies

0724 Photographic and optical equipment

0763 Post offices

0719 Second-hand goods

0708 Shopping centres and retail parks

0725 Stationery supplies

0710 Surplus goods

0726 Telephones and telephone cards

0694 Travel agencies

49 Motoring

0695 New vehicles

0696 Second-hand vehicles

0697 Vehicle auctions

0698 Vehicle parts and accessories

10 Transport

53 Air

0727 Aeronautical features

0728 Airports and landing strips

0729 Helipads

54 Road and rail

0730 Bridges

0733 Cattle grids

0734 Fords and level crossings

0735 Motorway service stations

0736 Parking

0737 Petrol and fuel stations

0739 Roadside telephone boxes

0740 Signalling facilities

0742 Tunnels

0743 Viaducts

0744 Weighbridges

55 Walking, riding and cycling

0746 Finger posts, guide posts and cairns

0747 Footbridges

0748 Footpaths, trails and bridleways

0757 Ski lifts and aerial cableways

0749 Stepping stones

0750 Subways

56 Water

0751 Aqueducts

0760 Ferries and ferry terminals

0752 Locks

0753 Moorings and unloading facilities

0754 Rivers and canal organisations and infrastructure

0755 Weirs, sluices and dams

57 Transport access points

0731 Bus and coach stations, depots and companies

0732 Bus stops

0759 Hail and ride zones

0794 London underground entrances

0738 Railway stations, junctions and halts

0758 Taxi ranks

0756 Tram, metro and light railway stations and stops

0761 Underground network stations

Annexe B Points of Interest provenance

The following percentages are indicative only. They are correct at the date of issue of this document but are subject to change without notice.

Provenance	Contribution
Ordnance Survey	46%
THOMSON Directories	37%
Department for Transport (NaPTAN)	9%
UK Payphone Directory	4%
LINK Interchange Network Ltd (Cash Machines)	1%
Education Direct	1%
Beechwood House Publishing Ltd (Health Data)	1%

Additional Suppliers to Points of Interest (supplying <1% of total features)

ASDA Stores Ltd;

Association of Scottish Visitor Attractions;

Avon & Somerset Constabulary;

Avon Ambulance Service;

Avon Fire Brigade;

Bedfordshire & Hertfordshire Ambulance and Paramedic Service;

Bedfordshire and Luton Fire and Rescue Service;

Bedfordshire Police;

BP Oil UK;

Buckinghamshire Fire & Rescue Service;

Cambridgeshire Constabulary;

Cambridgeshire Fire & Rescue Service;

Central Scotland Fire Brigade;

Central Scotland Police;

Cheshire Constabulary;

Cheshire Fire Service;

City of London Police;

Cleveland Fire Brigade;

Cleveland Police;

Cornwall County Fire Brigade;

COsys Management Information Services (Golf Courses);

Cumbria Ambulance Service;

Cumbria Constabulary;

Cumbria Fire Service;

Derbyshire Constabulary;

Derbyshire Fire & Rescue;

Devon & Cornwall Constabulary;

Devon Fire & Rescue;

Dorset Ambulance Service;

Dorset Fire and Rescue Service;

Dorset Police;

Driving Standards Agency®;

Dumfries & Galloway Fire Brigade;

Durham and Darlington Fire and Rescue Authority;

Durham Constabulary;

Dyfed-Powys Police;

East Anglian Ambulance Service;

East Midlands Ambulance Service;

East Sussex Fire and Rescue Service;

Essex Ambulance Service;

Essex County Fire and Rescue Service;

Essex Police;

Esso Retail Petroleum Services Ltd;

Fife Constabulary;

Fife Fire & Rescue Service;

Gloucestershire Ambulance Service;

Gloucestershire Constabulary;

Gloucestershire Fire & Rescue;

Grampian Fire Brigade;

Grampian Police;

Greater Manchester Ambulance Service;

Greater Manchester Fire Service;

Greater Manchester Police;

Gwent Police;

Hampshire Ambulance Service;

Hampshire Constabulary;

Hampshire Fire & Rescue;

Hereford & Worcester Ambulance Service;

Hereford & Worcester Fire Brigade;

Hertfordshire Constabulary;

Hertfordshire Fire & Rescue;

Highlands & Islands Fire Brigade;

Historic Houses Association;

Humberside Fire Brigade;

Humberside Police;

Isle of Wight Ambulance Service;

Isle of Wight Fire & Rescue;

Kent Ambulance Service;

Kent County Constabulary;

Kent Fire Brigade;

Lancashire Ambulance Service;

Lancashire Constabulary;

Lancashire Fire and Rescue Service;

Leicestershire Constabulary;

Leicestershire Fire & Rescue;

Lincolnshire Ambulance Service;

Lincolnshire Fire & Rescue;

Lincolnshire Police;

Little Chef®;

London Ambulance Service;

London Fire Brigade;

London Metropolitan Police;

Lothian & Borders Fire Brigade;

Lothian & Borders Police;

Mersey Regional Ambulance Service;

Merseyside Fire Service;

Merseyside Police;

Mid & West Wales Fire & Rescue Service;

Moto®;

Murco Petroleum Limited;

National Association of Citizens Advice Bureaux;

National Trust for Scotland;

Norfolk Constabulary;

Norfolk Fire Service;

North East Ambulance Service;

North Wales Fire And Rescue Service;

North Wales Police;

North Yorkshire Fire and Rescue Service;

North Yorkshire Police;

Northamptonshire Constabulary;

Northamptonshire Fire and Rescue Service;

Northern Constabulary;

Northumberland Fire and Rescue Service;

Northumbria Police;

Nottinghamshire Fire and Rescue Service;

Nottinghamshire Police;

Oxfordshire Ambulance Service;

Oxfordshire Fire Service;

PointX;

RoadChef Motorways Ltd;

Royal Berkshire Fire & Rescue Service;

Royal Mail®;

Royal Society for the Protection of Birds;

Scottish Ambulance Service;

Scottish Court Service;

Shaw & Sons Limited (Law Courts);

Shell Oil Products Ltd;

Shropshire Ambulance Service;

Shropshire Fire & Rescue;

Somerset Fire Brigade;

South Wales Fire Service;

South Wales Police;

South Yorkshire Ambulance Service;

South Yorkshire Fire & Rescue;

South Yorkshire Police Headquarters;

Sport Scotland;

Sports Council for Wales;

Staffordshire Fire and Rescue Service;

Staffordshire Police Headquarters;

Strathclyde Fire Brigade;

Strathclyde Police;

Suffolk Fire Service;

Suffolk Police;

Surrey Ambulance Service;

Surrey Fire & Rescue;

Surrey Police;

Sussex Ambulance Service;

Sussex Police;

Tayside Fire Brigade;

Tayside Police;

Tees, East and North Yorkshire Ambulance Service;

Texaco Ltd;

Thames Valley Police;

The Court Service;

Total UK Limited;

Transport for London;

Two Shires Ambulance Service;

Tyne & Wear Fire Brigade;

Warwickshire Ambulance Service;

Warwickshire Fire and Rescue Service;

Warwickshire Police;

Welcome Break Group Ltd;

Welsh Ambulance Service;

West Mercia Constabulary;

West Midlands Ambulance Service;

West Midlands Fire Service;

West Midlands Police;

West Sussex Fire & Rescue Service;

West Yorkshire Fire Service;

West Yorkshire Metropolitan Ambulance Service;

West Yorkshire Police®;

West Country Ambulance Service;

Wiltshire Ambulance Service;

Wiltshire Constabulary;

Wiltshire Fire Brigade.

Annexe C Completeness coding by category

These are estimates and should be treated as indicative only. Both the code value and the category code are correct at the date of issue of this document, but are subject to change without notice.

Code 5 81%–100% complete

Code 4 61%–80% complete

Code 3 41%–60% complete

Code 2 21%–40% complete

Code 1 0%–20% complete

Category	Category description	Code
1	Accommodation	5
2	Eating – Drinking	5
3	Construction services	5
4	Consultancies	5
5	Employment And Career agencies	5
6	Engineering services	5
7	Hiring And Contract services	5
8	IT, Advertising, Marketing – Media services	5
9	Legal And Financial	5
10	Personal, Consumer And Other services	5
11	Property And Development services	5
12	Recycling services	5
13	Repair And Servicing	5
14	Research And Design	5
15	Transport, Storage And Delivery	5
16	Botanical And Zoological	5
17	Historical And Cultural	4
18	Recreational	5
19	Landscape Features	5
20	Tourism	4
21	Entertainment support services	5
22	Gambling	5
23	Outdoor pursuits	5
24	Sports complex	5
25	Venues, Stage And Screen	5
26	Animal welfare	5
27	Education support services	5
28	Health practitioners And Establishments	5
29	Health support services	5
30	Medical establishments	5
31	Primary, Secondary And Tertiary education	5

Category	Category description	Code
32	Recreational And Vocational education	5
33	Central And Local government	5
34	Infrastructure And Facilities	5
35	Organisations	5
36	Publicly accessible facilities	5
37	Consumer products	5
38	Extractive industries	5
39	Farming	5
40	Foodstuffs	5
41	Industrial features	5
42	Industrial products	5
43	Consumer products	5
44	Foodstuffs	5
45	Industrial products	5
46	Clothing – Accessories	5
47	Food – Drink	5
48	Household, Leisure – Garden	5
49	Motoring	5
50	Multi-item retail	5
51	Niche goods	5
52	Office, IT – Electrical	5
53	Air	5
54	Road – Rail	5
55	Walking, Riding – Cycling	3
56	Water	5
57	Transport access points	5

Annexe D Product and service performance report form

Ordnance Survey welcomes feedback from its customers about Points of Interest.

If you would like to share your thoughts with us, please print a copy of this form and when completed post or fax it to the address below.

Your name: .....

Organisation: .....

Address: .....

.....

.....

Postcode: .....

Phone: .....

Fax: .....

Email: .....

Quotation or order reference: .....

Please record your comments or feedback in the space below. We will acknowledge receipt of your form within three (3) working days and provide you with a full reply or a status report within 21 working days.

If you are posting this form, please send it to:

Points of Interest Product Manager, Ordnance Survey, Romsey Road, SOUTHAMPTON, SO16 4GU.

If you wish to return it by fax, please dial 023 8079 2615.

Any personal information that you supply with this report form will be used by Ordnance Survey only in the improvement of its products and services. It will not be made available to third parties.

Points of Interest

Technical specification

Contents

Section		Page no
Introduction		**49**
	Purpose of this specification and disclaimer	49
	Copyright in this specification	49
Chapter 1	**Utilising Points of Interest**	**50**
	Requirements	50
	Supply definition	50
	File sizes	50
	Points of Interest directory structure	50
Chapter 2	**Pipe Delimited Text (PDT) File Format**	**52**
	The PDT format	52
	Rules for holding Points of Interest in PDT	52
Chapter 3	**Record Structures for the transfer of Points of Interest in PDT format.**	**53**
	Record structure	53
Annexe A	**Glossary**	**56**

v2.7 – 09/2008

Introduction

Purpose of this specification and disclaimer

This is the technical specification (hereafter referred to as the specification) applicable to the Points of Interest (hereafter referred to as the product) which is referred to in the Framework Direct Licence, Specific Use Framework Partner Licence or your other customer contract for the product.

We may change the information in this specification at any time, giving you the notice period specified in the customer contract made between you and Ordnance Survey.

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Chapter 1 Utilising Points of Interest

Requirements

Points of Interest is a data product and does not include software for analysis, but can be used with a variety of programs and applications. Points of Interest can be loaded onto any desktop PC that has a program capable of importing a delimited text file. If using a geographical information system (GIS), customers are encouraged to contact the system vendor to establish actual system requirements.

Supply definition

Points of Interest is only available for Great Britain (England, Scotland and Wales) and is supplied on CD-ROM containing Pipe Delimited Text file data.

Points of Interest is only available in Pipe Delimited Text file format.

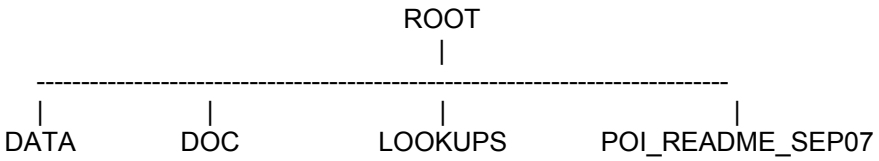
The data are delivered compressed.

File sizes

A national (Great Britain) set of Points of Interest is currently approximately 500 Mb in size.

Points of Interest directory structure

The directory structure of this CD-ROM/DVD is shown below:



ROOT Directory

The ROOT directory will contain the following ASCII text file:

- This file – POI_README_SEP07.TXT

The ROOT directory will contain the following Directories:

- DATA
- DOC
- LOOKUPS

DATA Directory

The DATA directory will contain the data files for your order:

- FEATURES1.TXT
- FEATURES2.TXT

Each order contains one or more FEATURES TXT files.

The number supplied depends upon the amount of data you have ordered.

At the time of writing National Cover comprised of four FEATURES pipe delimited text file.

See chapter 2 in this technical specification for more details about pipe delimited files and the other files supplied with your order.

DOC Directory

- CLASSIFICATION_AMENDMENTS_V2_2.PDF – Amendments to the POI Classification.
- CLASSIFICATION_SCHEME_V2_2.PDF – POI Classification.
- DATA_SUPPLIERS_SEP07.PDF – Background notes on the Data Suppliers.
- DESC_CLASS_REPORT_SEPT07.pdf – Descriptive Class Reporting documentation.
- DISCCARE.TXT – Information of the care of CDs/DVDs.
- KEYWORDS_DOCUMENTATION.PDF – Using the Keywords information.
- POI_USERGUIDE_V2_4_JUN07.PDF – The POI User Guide.
- PRODUCT_AMENDMENTS_SEP07.TXT – Product amendment information.
- README_1.PDF – Important licence information for customers taking Link Interchange Network data.
- README_2.PDF – Important licence information for all customers.
- SIC_DOCUMENTATION_SEP07.PDF – Using the POI Class to SIC Lookup.

The DOC directory may also contain documentation relating to the specification of the requested data format.

The DOC directory may contain additional documentation specific to that supply.

LOOKUPS Directory

The LOOKUPS directory will contain the ASCII text files:

- CATEGORIES_LOOKUPS.TXT – the categories lookups within the classification.
- CLASSIFICATION_LOOKUPS.TXT – the classification lookups.
- COMPLETENESS.TXT – information about the completeness of the data.
- GROUPS_LOOKUPS.TXT – the groups lookups within the classification.
- KEYWORDS.TXT – keywords information.
- POI_CLASS_TO_SIC_LOOKUP.TXT – the POI Classes linked to the SIC.
- POSITIONAL_ACCURACY_LOOKUP.TXT – the positional accuracy lookups.

The LOOKUPS directory may include updates to the Lookups for a specific release.

Chapter 2 Pipe Delimited Text (PDT) File Format

The PDT format

Pipe Delimited format is a text file format, similar in principle to the more common CSV or Comma Separated Variable format. PDT is a de facto standard method for delivering data. PDT has been chosen instead of Comma Separated variables because some of the attribution may contain commas, for example, within addresses. This is one of the simplest data formats in which to supply data. PDT can be imported and used in most desktop spreadsheet or database applications as well as within more complex geographical information systems. Once imported, it may be possible, depending on the application, to export to word processing or presentation packages.

Rules for holding Points of Interest in PDT

Points of Interest information in PDT is held within individual fields. Each field is either textual (can contain letters or numbers), for example, SO515RU, or numeric, for example, 21. Each field is separated from the next by the ASCII pipe symbol (|) which is a keyboard symbol often found on the backslash key. If the field is textual, or should be treated as a character field even when the stored value is a number, then the text is enclosed in double quotes.

Chapter 3 Record Structures for the transfer of Points of Interest in PDT format.

Record structure

The PDT file will contain the following fields, separated by a pipe, in this order.

FIELD NAME	Entry always required?	DATA TYPE	LENGTH	COMMENTS
RECORD_TYPE	YES	TEXT	(1)	This indicates the record type and is always going to be '**L**' for load.
UNIQUE_REFERENCE_NUMBER	YES	NUMBER	(Currently unlimited but unlikely to exceed 12 figures for the foreseeable future.)	Unique identifier, allocated by PointX for each record within the database.
SUPPLIER_REFERENCE_NUMBER	NO	TEXT	(255)	Enables each database record to be linked to additional information held by the data supplier. Numbers, text and pipes **|** permitted. **Distributor only field.**
TOID	YES	TEXT	(20)	Up to 16 digits. Does not currently include the 'osgb' prefix. Can be '**Not Assigned**'. Not Assigned is the value PointX will provide where a TOID number is not provided and is the exception.
TOID_VERSION	YES	NUMBER	(Currently unlimited length but unlikely to exceed 5 figures for the foreseeable future.)	Identifies which version of TOID® is being used for each record. If the TOID value provided is '**Not Assigned**' then the value of the TOID_VERSION will be **0** (zero).
NAME	YES	TEXT	(255)	Name of the organisation or record provided by the data supplier, for example, **Southampton General Hospital**. Can be the Classification, for example '**Council Office**' or '**Newspaper And Magazine Publisher**'.
ADDRESS_DETAIL	NO	TEXT	(255)	Not always supplied for a VERIFIED_ADDRESS. The field will be null if VERIFIED_ADDRESS="N"

FIELD NAME	Entry always required?	DATA TYPE	LENGTH	COMMENTS
STREET_NAME	NO	TEXT	(255)	Not always supplied for a VERIFIED_ADDRESS. The field will be null if VERIFIED_ADDRESS="N"
LOCALITY	NO	TEXT	(255)	Matched addresses (VERIFIED_ADDRESS = **Y**) must contain the name of the postal town that the feature is located within. For extra clarification, when an address has a dependent locality within it, this will prefix the postal town in the resulting output with a comma separating the 2 elements.
POSTCODE	NO	TEXT	(255)	Matched addresses (VERIFIED_ADDRESS = **Y**) must contain the postcode that the feature is located within. In practice, this field will have a maximum of 8 alphanumeric characters.
VERIFIED_ADDRESS	YES	TEXT	(1)	A flag of '**Y**' indicates the provided address has been matched against Ordnance Survey Address and amended accordingly. A flag of '**N**' means not matched and structured semi-automatically.
TELEPHONE_NUMBER	YES	TEXT	(255)	Contains telephone number and related information. Has a value of '**Not Supplied**' if no value is supplied. Leading zeros, numbers and other characters permitted. This field is only available in orders to customers that are from eligible market sectors.
POINTX_CLASSIFICATION_CODE	YES	TEXT	(8)	This field contains an eight digit number which equates to the three levels – **Group**, **Category** and **Class** – of the record. This code can be used to link to the classification lookup to identify the textual description associated with this eight digit code. Text to prevent leading zero loss.

FIELD NAME	Entry always required?	DATA TYPE	LENGTH	COMMENTS
EASTING	YES	NUMBER	(10,3)	'**Easting**' element of the record's National Grid Reference. Up to 3 decimal places.
NORTHING	YES	NUMBER	(11,3)	'**Northing**' element of the record's National Grid Reference. Up to 3 decimal places.
PROVENANCE	YES	TEXT	(255)	Name of the Data Supplier. **Distributor only field.**
DATE OF SUPPLY	YES	DATE	(11)	Form **DD-MMM-YYYY**
POSITIONAL ACCURACY CODE	YES	NUMBER	(1)	Permitted range of values from **1** through **4**
SUPPLIER LINK	NO	TEXT	(255)	Supplier Link information. **Distributor only field.**

Those fields containing text, that is, alphanumerics (A) will be enclosed by double quotes; the double quotes **have not been included** in the sizes listed above.

Fields with null data will appear empty.

Each record will be terminated with a carriage return character (ASCII 13) and a line feed character (ASCII 10).

Example of a Points of Interest record:

```
"L"|18712384|"1000000235502642"|4|"Sewage Pumping
Station"|""|""|""|""|"N"|"06340441"|341059|354356|"31-DEC-2001"|"2"
```

Annexe A Glossary

The purpose of this chapter is to provide a glossary of terms used in the definition of products, services, licensing and other terms and conditions for Points of Interest.

Where terms refer to other terms within the glossary, they are connected by means of hot links to the relevant entries.

account
Every OS MasterMap customer has an account. This is more than just a financial account, but is an overarching term for the agreements, orders, access rights and financial arrangements that a customer has with Ordnance Survey.

application service provider (ASP)
A company that offers individuals or enterprises access over the Internet to an application programmes provider (for example, GIS) and related services that would otherwise have to be located in their own personal or enterprise computers. This may also include access to relevant related data.

area of interest
The spatial extent that a customer has access to for a specific product. This area of interest may include a number of different spatial extents. The area of interest is an integral part of a contract.

area of order
The spatial extent of data requested by a customer as part of an order. It may comprise a number of different spatial extents, but all of them will fall completely within the customer's area of interest.

associated data
A dataset held by third parties that has been linked to features within OS MasterMap by means of identifiers (TOIDs).

attribute
Any item of information packaged to a Points of Interest feature. The reference number and the geometry of the feature are both examples of the attributes of the feature.

attribute set
A group of attributes that can legitimately be used together.

commercial service provider
See application service provider (ASP).

complex feature
A feature that is a collection of other features. An example could be a feature representing a river, composed of many area and line features representing parts of the river.

contract
The agreement that a customer has for access to Ordnance Survey products and services. The contract will include a time period, the number of terminals the data will be used on and a set of terms and conditions.

coordinate transformation
A computational process of converting an image or map from one coordinate system to another.

customer
An organisation or individual that makes use of Ordnance Survey's data supply facilities. This includes both direct sales customers of Ordnance Survey and Ordnance Survey Options®, as well as customers of Licensed Partners. It does not include anyone, or any organisation, that has access to Ordnance Survey material without charge.

dataset
An identifiable set of data that share common characteristics and that is managed as a subset of the data within a database.

delivery mechanism
The method of supply of data to a customer (for example, offline and online).

digital identifier
An identifier that is primarily intended to provide unique and unambiguous feature identification for the purposes of exchanging feature-based information between computer systems or associating data within a computer system.

direct sale
A direct transaction between Ordnance Survey and a customer.

direct sale price
Those prices that are applied where Ordnance Survey supplies OS MasterMap based products and services directly to customers.

estimate
A single price being offered to the customer as the cost of a proposed service definition agreement.

feature
An abstraction of a real world object. It is not the real world object itself.

feature attribute
See attribute.

geoid
An imaginary shape for the Earth defined by mean sea level and its imagined continuation under the continents at the same level of gravitational potential.

georectified imagery
The georectification method is a very simple process that uses detail points visible in the image and on the map. The image is then warped to fit the map on those points. There is no information to ensure that the image fits the map elsewhere.

GPS
Global Positioning System. A satellite based navigational system allowing the determination of any point on the Earth's surface with a high degree of accuracy, given a suitable GPS receiver.

Licensed Partner
Any organisation that has entered into a formal licence agreement with Ordnance Survey to market map information or to incorporate map data with their application or service.

line
The straight-line segment between two given points. Not to be confused with polyline or line segment feature.

local holdings
The situation where a customer has to hold and manage data that is supplied to them.

media supply
See offline supply.

metadata
Graphical or textual information about the content, quality, condition, origins and characteristics of data.

National GPS Network
The infrastructure of Active and Passive GPS reference stations that allows surveyors to determine precise coordinates in GPS and British National Grid spatial reference systems. The National GPS Network provides the physical definition of the British National Grid, the primary spatial reference system used in OS MasterMap. A central component of the Digital National Framework.

National Grid
A unique referencing system that can be applied to all Ordnance Survey maps of Great Britain at all scales. It provides an unambiguous spatial reference for any place or entity in Great Britain.

object based data
Data in which one entity (feature) represents one real world object, for example, a building or land parcel.

offline supply
The supply of data to a customer on physical media (examples: CD and DVD).

online supply
The supply of data to a customer using Internet technologies.

order
A request from a customer for the supply of data. The scope of an order may be constrained by an agreement for a period licence service.

orthorectified imagery
The Imagery Layer is orthorectified. An ortho image is achieved through a rigorous mathematical modelling of the camera position/direction and the terrain surface at the moment of image exposure. A software process is then able to move each of the pixels in the image individually into its correct National Grid position. The process eliminates displacements due to image perspective and pointing direction (the aircraft is moving and rolls around all axes) and topographic relief and therefore results in an image having the same geometric properties as a map projection.

pay as you go
See Pay as you use service.

Pay as you use service
A service provided by Licensed Partners giving access to Ordnance Survey data for business use on a transaction basis as an added value service.

PAYU
Pay as you use.

period licence
A licence to use a data product or any other value added service or product derived from detailed datasets, for business use for an agreed period of one or more years. It covers the initial supply of the data, and supply of updates.

period licence service
A service provided to customers by Ordnance Survey or Licensed Partners giving access to Ordnance Survey data for business use, including update maintenance. The service will be for a defined period. These services will be available under a period-licence agreement.

point
A pair of coordinates.

point feature
A feature representing a real world object. The geometry of a point feature is a single point (a pair of coordinates) with optional size and orientation.

positional accuracy
The accuracy of the feature geometry relative to the coordinate spatial reference system.

real time
An immediate response. The processing of data by a computer as rapidly as the data is input, or within some small upper limit of response time. This is **not** synonymous with online.

real world object
The real thing represented by a feature; for instance, a building, a section of fence, the boundary of a wood, a sharp change of gradient.

representative point
A point feature used to represent a real world object (for example, centroids, seeds, area labels).

SLA
Service level agreement.

spatial reference system
See National Grid.

supply format
The file format in which the data is supplied to the customer.

terminal multiplier
A pricing multiplier that reflects the number of terminals or workstations that have access to Ordnance Survey data (whether simultaneous or not).

tile
A self-contained rectangular subset of digital data, used to subdivide that data into manageable units. OS MasterMap data has no tiles.

TOID
A number that uniquely identifies every feature. No intelligence (for example, its coordinate position) about the feature can be derived from either the allocated number or the process by which it is allocated. The TOID will remain with the feature throughout its life and will not be reassigned to a new feature when the existing feature is deleted.

tuple (coordinate tuple)
A set of n coordinates representing a point in n dimensional space, as defined by a spatial reference system. The British National Grid reference system is 2 D only, so coordinate tuples consist of an easting and a northing coordinate.

unit of supply
The definition of the way in which the area of order is broken up into manageable, physical units (files) for supply to the customer.

version
Version number for the feature's TOID.

version date
The date the version of the feature was created by Ordnance Survey within their master database of OS MasterMap.

version number
A version number will identify that a feature has been altered. Version numbers will be allocated sequentially, with version 1 representing the creation of the feature.